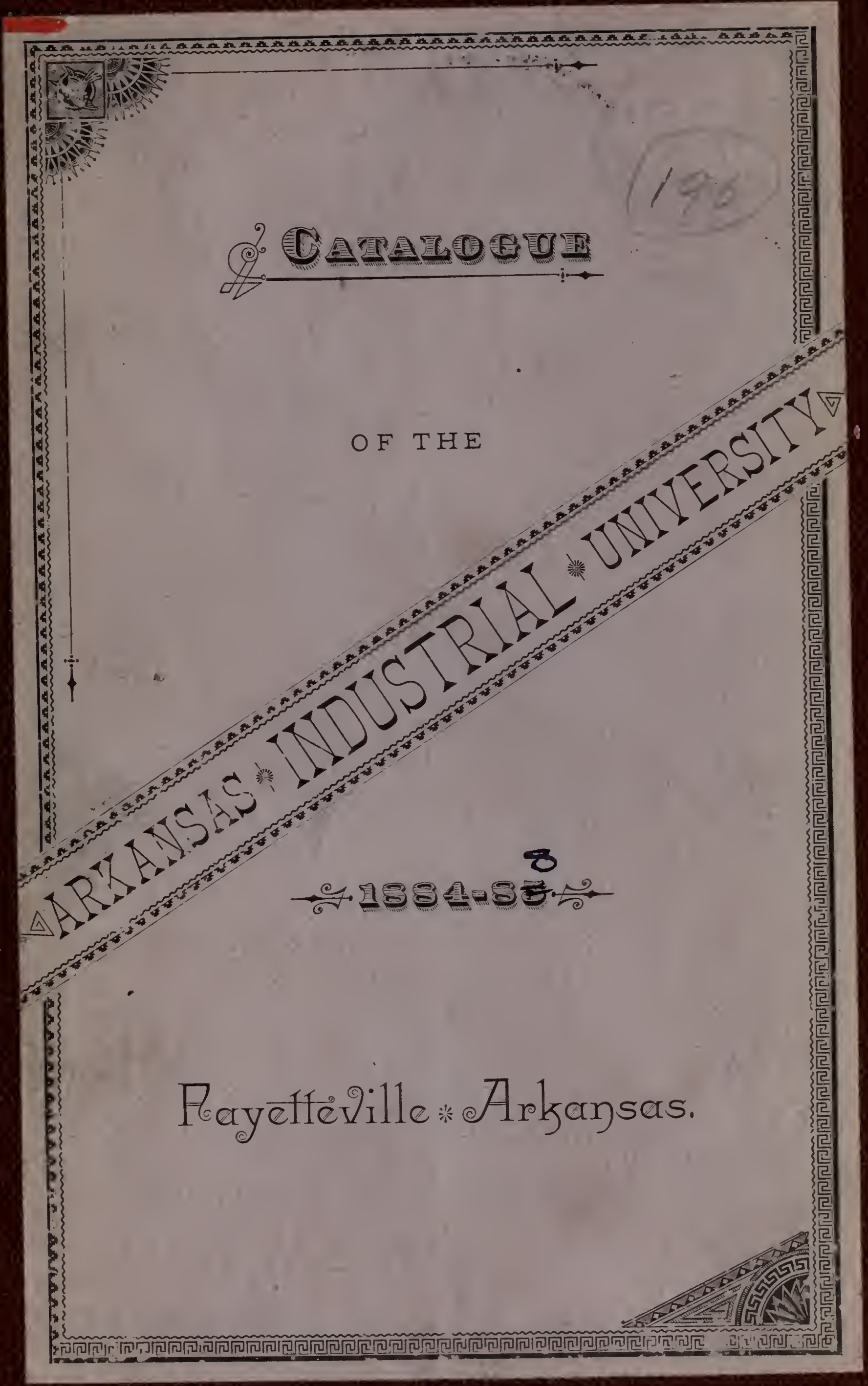

196

CATALOGUE

OF THE

ARKANSAS INDUSTRIAL UNIVERSITY

8

1884-85

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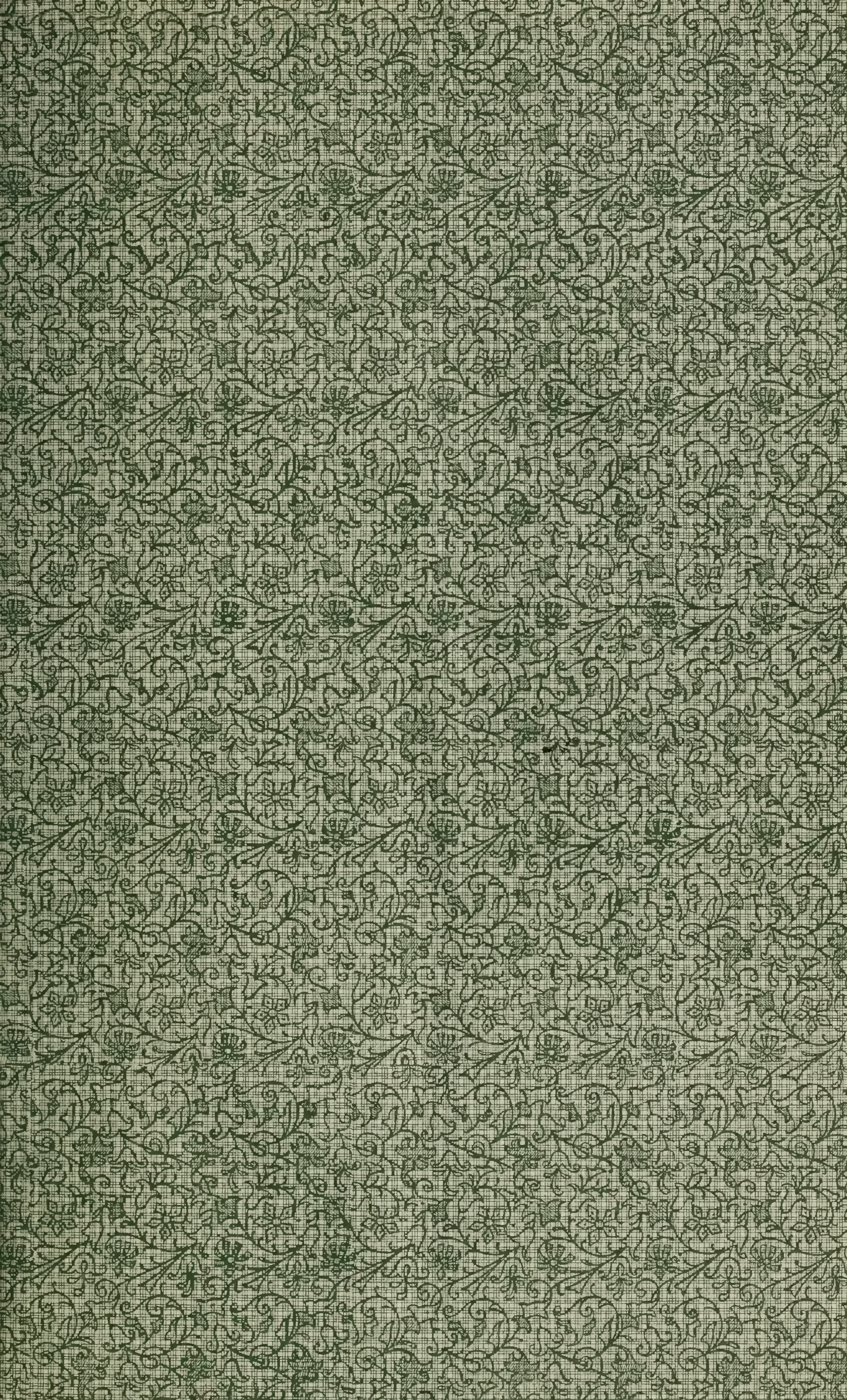

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THIRTEENTH CATALOGUE

OF THE

ARKANSAS INDUSTRIAL UNIVERSITY,

LOCATED AT

Fayetteville, Washington County, Ark.,

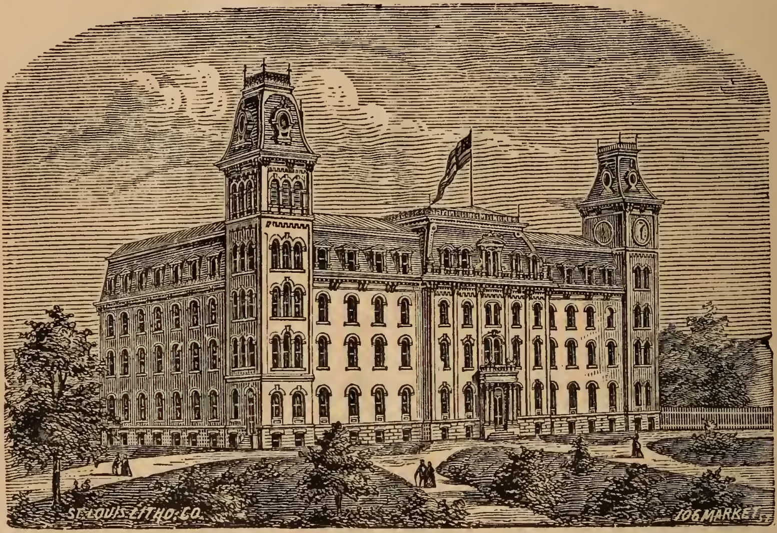
FOR THE YEAR ENDING JUNE 11, 1885,

AND

ANNOUNCEMENT FOR 1885-86.

LITTLE ROCK, ARK.
GAZETTE PRINTING COMPANY,
1885.

ARKANSAS INDUSTRIAL UNIVERSITY,



DIMENSIONS AND CAPACITY.

It is 214 feet long by 122 feet wide, covering an area of 26,108 square feet. It is five stories high, with French or Mansard roof, covered with slate and tin. The height of the building is 134 feet.

The basement story is built of stone; the foundation is bedded with solid rock. The next three stories are built of brick, and the attic of wood. The basement story is in height 13 feet in the clear; first and second stories 16 feet each; third and fourth, 12 feet; the clock and bell towers extending two stories above the attic.

There are ten rooms 77 by 61 feet, ten rooms 22 by 29 feet, ten rooms 22 by 28 feet, ten rooms 22 by 25 feet, ten rooms 22 by 22 feet, ten rooms 22 by 19 feet, five rooms 15 by 28 feet, four rooms 22 by 20 feet and one room 74 by 50 feet—making a total of seventy rooms. In addition, there are four corridors 15 by 28 feet and four corridors 14 by 210 feet.

BOARD OF TRUSTEES.

EX-OFFICIO PRESIDENT OF THE BOARD,
His Excellency, SIMON P. HUGHES, Governor,
Little Rock, Ark.

REGENT AND SECRETARY,
J. L. CRAVENS, Fayetteville, Ark.

TREASURER,
S. P. PITTMAN, Fayetteville, Ark.

TRUSTEES:

HON. JOSEPH W. MARTIN	Little Rock, Ark.
HON. J. T. BEARDEN	Camden, Ark.
HON. J. P. EAGLE	Lonoke, Ark.
HON. CHARLES COFFIN	Walnut Ridge, Ark.
HON. GEORGE J. CRUMP	Harrison, Ark.
HON. THOMAS M. GUNTER	Fayetteville, Ark.

EX-OFFICIO TRUSTEES:
HON. WOOD E. THOMPSON, SUP'T. PUBLIC INSTRUCTION,
Little Rock, Ark.
COL. GEO. M. EDGAR, PRESIDENT OF THE UNIVERSITY,
Fayetteville, Ark.

EXECUTIVE COMMITTEE:
J. W. MARTIN, CHAIRMAN, CHAS. COFFIN, J. P. EAGLE,
W. E. THOMPSON, J. T. BEARDEN.

FINANCE COMMITTEE:
T. M. GUNTER, CHAIRMAN, G. J. CRUMP, J. T. BEARDEN.

COMMITTEE ON BY-LAWS:
G. J. CRUMP, CHAIRMAN, CHAS. COFFIN, J. P. EAGLE.

PRINTING COMMITTEE:
GEO. M. EDGAR, CHAIRMAN, CHAS. COFFIN, T. M. GUNTER.

COMMITTEE ON BRANCH NORMAL COLLEGE:
THE GOVERNOR, CHAIRMAN, J. T. BEARDEN, W. E. THOMPSON, J. P. EAGLE.

BOARD OF TRUSTEES OF MEDICAL DEPARTMENT:

P. O. HOOPER, M. D	Little Rock, Ark.
E. R. DUVAL, M. D	Fort Smith, Ark.
WM. THOMPSON, M. D	Little Rock, Ark.

BOARD OF VISITORS—1884-85:

HON. B. T. DuVALL	Fort Smith, Ark.
HON. L. L. THOMPSON	Pulaski county, Ark.
HON. J. E. RIDDICK	Gainesville, Greene county, Ark.
HON. J. H. MOORE	Arkansas Post, Ark.
HON. J. M. TAYLOR	Toledo, Cleveland county, Ark.
HON. W. E. RANDLE	Sulphur Rock, Ark.

65410

OFFICERS AND INSTRUCTORS.

COL. GEO. M. EDGAR,
President and Professor of Psychology and Ethics.

R. H. WILLIS, JR., A. M.,
Professor of Ancient Languages and Ancient History.

HOWARD EDWARDS, A. M.,
Professor of English, French, German and Modern History.

E. H. MURFEE, A. M.,
Professor of Pure Mathematics and Logic.

J. M. WHITHAM, (Graduate of U. S. Naval Academy),
Professor of Applied Mathematics and Commandant of Cadets.

GEORGE D. PURINTON, A. M.,
Professor of Chemistry, Mineralogy, Geology and Biology.

J. F. HOWELL, A. M.,
Professor of Normal Department, and Ex-officio Principal of Preparatory Classes.

A. F. LEWIS, A. B., GEO. W. MACON, A. B., J. B. GREENE, A. B.,
MISS V. W. HANKINS, MISS E. C. WEIMAR,
Literary Assistants.

MISS KATIE V. KING,
Instructor of Music.

* ....
Instructor of Drawing, Designing and Book-keeping.

* ....
Superintendent of Work-shops.

---

* To be filled.

MEDICAL DEPARTMENT.

LITTLE ROCK, ARK.

SESSION OF 1885-86.

PROFESSORS:

P. O. HOOPER, M. D.,
Practice of Medicine, and President of the Faculty.

EDWIN BENTLEY, M. D.,
Institutes and Practice of Surgery.

A. L. BREYSACHER, M. D.,
Obstetrics and Diseases of Women and Children.

JAS. A. DIBRELL, Jr., M. D.,
General, Descriptive and Surgical Anatomy.

JOHN J. McALMONT, M. D.,
Materia Medica, Therapeutics, Hygiene and Botany.

JAMES H. SOUTHALL, M. D.,
Institutes of Medicine.

ROSCOE G. JENNINGS, M. D.,
Clinical Surgery and Dermatology.

J. B. BOND, M. D.,
Medical Chemistry and Toxicology.

L. P. GIBSON, M. D.,
Demonstrator of Anatomy.

T. E. MURRELL, M. D.,
Ophthalmology and Otology.

JAMES H. LENOW, M. D.,
Diseases of Genito-Urinary Organs.

CLAIBORNE WATKINS, M. D.,
Physical Diagnosis and Clinical Medicine.

LOUIS R. STARK, M. D.,
Gynæcology.

JOHN WATERS, M. D.,
Clinical Medicine and Prosector of Anatomy.

W. U. SIMONS, U. S. Signal Service,
Meteorology, Etc.

John Canonico, Janitor, at the College, on Second, bet. Main and Louisiana Sts. All communications should be addressed to R. G. JENNINGS, M. D., Secretary of the Faculty, Little Rock, Ark.

CATALOGUE OF STUDENTS,

FOR THE SESSION COMMENCING SEPTEMBER 2, 1884, AND ENDING JUNE 11, 1885.

COLLEGIATE DEPARTMENT.

G. W. M. REED, ... Fayetteville, Ark., Post Graduate.

SENIOR CLASS.

Hart, J. C	Dardanelle, Yell county, Ark.
Howell, J. W	Clarksville, Johnson county, Ark.
Kinsworthy, E. B	Black Colony, Sevier county, Ark.
Notrebe, E. P	Sarassa, Lincoln county, Ark.
Woodall, W. H	El Paso, White county, Ark.
Woolverton, C. D	Center Ridge, Conway county, Ark.

Total, 6.

JUNIOR CLASS.

Bates, J. H	Cincinnati, Washington county, Ark.
Leverett, Mary	Fayetteville, Washington county, Ark.
Middleton, Mai	Fayetteville, “ “ “
Mulholland, Sarah	Fayetteville, “ “ “
Sadler, W. P	Paris, Logan county, Ark.
Smith, A. M	Webb City, Franklin county, Ark.
Tillar, B. J	Tillar's Station, Drew county, Ark.

Total, 7.

SOPHOMORE CLASS.

Berry, Nellie F	Little Rock, Pulaski county, Ark.
Campbell, N. B	Stone Point, Van Zandt county, Texas.
Crump, Mintie H	Harrison, Boone county, Ark.
Dickson, W. E	Magnolia, Columbia county, Ark.
Duffie, B. C	Princeton, Dallas county, Ark.
Felker, G. W	Ozark, Franklin county, Ark.
Gibson, A. V	DeWitt, Arkansas county, Ark.
Hipolite, F. A	Devall's Bluff, Prairie county, Ark.
Hipolite, W. H	Devall's Bluff, “ “ “
Howell, J. R	Russellville, Pope county, Ark.
Humphreys, T. H	Fort Smith, Sebastian county, Ark.
Laster, S. L	Clarksville, Johnson county, Ark.
McIlroy, W. R	Fayetteville, Washington county, Ark.
Nixon, Esmay	Springfield, Missouri.

Rowland, J. H.	Summerville, Calhoun county, Ark.
Sutton, H. S.	Fayetteville, Washington county, Ark.
Vaughan, W. R.	Little Rock, Pulaski county, Ark.
Whitlock, T.	Charleston, Franklin county, Ark.
Wilkinson, H. D.	Lavaca, Sebastian county, Ark.

Total, 19.

FRESHMAN CLASS.

Agee, Ella R.	Camden, Ouachita county, Ark.
Alfrey, R. J.	Siloam, Benton county, Ark.
Bates, W. R.	Cincinnati, Washington county, Ark.
Brown, W. W.	Camden, Ouachita county, Ark.
Brown, J. W.	Camden, “ “ “
Daneher, Mike	Little Rock, Pulaski county, Ark.
Dixon, C. W.	Malvern, Hot Spring county, Ark.
Drake, N. F.	Cincinnati, Washington county, Ark.
Flynn, W. M.	Fayetteville, Washington county, Ark.
Freyschlag, E. M.	Fayetteville, “ “ “
Hall, H. J.	Fayetteville, “ “ “
Harris, Ada	Fayetteville, “ “ “
Healy, C. J.	Fayetteville, “ “ “
Hobbs, T. H.	Fayetteville, “ “ “
Knight, F. M.	Fayetteville, “ “ “
Lewis, J. L.	Nevada, Missouri.
Maguire, H. M.	Maguire's Store, “ “ “
Mason, J. M.	Mulberry, Franklin county, Ark.
Miller, Wm.	Plantersville, Drew county, Ark.
Nealy, E. A.	Fayetteville, Washington county, Ark.
Obenshain, Ora	Fayetteville, “ “ “
Ostrander, Effie	Fayetteville, “ “ “
Pace, Ida	Fayetteville, “ “ “
Polson, Alice	Southwest City, McDonald county, Mo.
Powell, W. W.	Melbourne, Izard county, Ark.
Reed, J. L.	Fayetteville, Washington county, Ark.
Simms, W. C.	Washington, Hempstead county, Ark.
Stone, A. B.	Fayetteville, Washington county, Ark.
Treadwell, Lee	Toledo, Cleveland county, Ark.
Trott, Robbie	Fayetteville, Washington county, Ark.
Warren, G. A.	Hazel Grove, Independence county, Ark.
Whitlow, Mabel	Pilot Grove, Cooper county, Mo.
Williams, H. E.	Fayetteville, Washington county, Ark.

Total, 33.

IRREGULAR.

Sutton, Mollie	Fayetteville, Washington county, Ark.

PREPARATORY DEPARTMENT.

SUB-FRESHMAN CLASS.

Aiken, Don	Fayetteville, Washington county, Ark.
Barry, Bell	Fayetteville, " " "
Bibb, J. M	Franklin, Simpson county, Ky.
Botefuehr, Beulah	Fayetteville, Washington county, Ark.
Carter, Nora	Fayetteville, " " "
Coffey, Belle	Fayetteville, " " "
Downes, S. A	Nashville, Howard county, Ark.
Easter, Annie	Hamburg, Ashley county, Ark.
Edgar, G. D	Fayetteville, Washington county, Ark.
Ellis, Kate	Fayetteville, " " "
Fuqua, Birdie	Fayetteville, " " "
Hayes, T. M	Amity, Clark county, Ark.
Hillhouse, G. A	Newport, Jackson county, Ark.
Holcomb, T. J	Springdale, Washington county, Ark.
Hood, D. L	Maguire's Store, Washington county, Ark
Juniel, J. W	Bearden, Ouachita county, Ark.
Kemp, Elzie	Fayetteville, Washington county, Ark.
McIlroy, J. H	Fayetteville, " " "
McNeely, J. C	Little Rock, Pulaski county, Ark.
McRoy, Minnie	Fayetteville, Washington county, Ark.
Pettus, Ada	Cabot, Lonoke county, Ark.
Reed, R. B	Springdale, Washington county, Ark.
Reed, W. L	Fayetteville, Washington county, Ark.
Rutherford, Julia	Billingsly, Washington county, Ark.
Skelton, G. V	Fayetteville, Washington county, Ark.
Slagle, Ida	Siloam, Benton county, Ark.
Thomas, B. W	Maguire's Store, Washington county, Ark
Tillman, Annie	Fayetteville, " " "
Trott, Bertha	Fayetteville, " " "
Valentine, J. T	Webb City, Franklin county, Ark.
Wainwright, Fannie	Fayetteville, Washington county, Ark.
Whitford, W. E	Silver Hill, Sevier county, Ark.

Total, 32.

A—I CLASS.

Baldwin, A. D	Newport, Jackson county, Ark.
Baum, Nettie	Fayetteville, Washington county, Ark.
Blanks, W. L	Hamburg, Ashley county, Ark.
Brookshear, W. R	Yellville, Marion county, Ark.
Brown, J. R	Gurdon, Clark county, Ark.
Brown, A. S	Charleston, Franklin county, Ark.
Campbell, Pearl	Texarkana, Miller county, Ark.
Corley, E. P	Fayetteville, Washington county, Ark.
Dowell, S. F	Fayetteville, " " "
Dowell, Delia	Fayetteville, " " "
Dunaway, W. C	Fayetteville, " " "

Dunaway, Maggie	Fayetteville, Washington county, Ark.
Ellis, Jessie	Fayetteville, “ “ “
George, J. F	Dardanelle, Yell county, Ark.
Gregg, H. L	Fayetteville, Washington county, Ark.
Gregg, Dora I	Fayetteville, “ “ “
Gunter, W. F	Fayetteville, “ “ “
Head, Dove	Richmond, Little River county, Ark.
Irvin, Ida L	Fayetteville, Washington county, Ark.
Irvin, R. W	Fayetteville, “ “ “
Layne, Abbie	Hamburg, Ashley county, Ark.
Pace, Frank	Fayetteville, Washington county, Ark.
Pittman, H. N	Fayetteville, “ “ “
Reynolds, Mattie	Fayetteville, “ “ “
Routh, Louella	Boonsboro, “ “ “
Rutherford, R. L	Fayetteville, “ “ “
Shreve, A. W	Farmington, “ ‘ “
Shreve, H. B	Farmington, “ “ “
Sloan, J. H	Powhatan, Lawrence county, Ark.
Taylor, Maggie	Fayetteville, Washington county, Ark.
Trent, J. C	Okmulgee (Creek Nation), In. Ter.
Turner, F. P	Charleston, Franklin county, Ark.
Valentine, Alice	Webb City, “ “ “
Walker, N. F	Boonsboro, Washington county, Ark.
Williams, W. E	Van Buren, Crawford county, Ark.
Williams, J. H	Maguire's Store, Washington county, Ark
Wilson, B. F	Springdale, Washington county, Ark.

Total, 37.

A—II CLASS.

Albright, G. E	Fayetteville, Washington county, Ark.
Anderson, W. L	Fayetteville, “ “ “
Baldridge, G. W	Fayetteville, “ “ “
Barton, Lizzie	Mound City, Crittenden county, Ark.
Blakeley, R. L	Cabin Creek, Johnson county, Ark.
Bowers, T. J	Graham, Independence county, Ark.
Brashear, G. E	Bentonville, Benton county, Ark.
Carter, J. M	Murfreesboro, Pike county, Ark.
Cravens, J. M	Fort Smith, Sebastian county, Ark.
Curry, May	Fayetteville, Washington county, Ark.
Dibrell, M. S	Van Buren, Crawford county, Ark.
Duke, Annie	Fayetteville, Washington county, Ark.
Edgar, Bessie	Fayetteville, “ “ “
Ferguson, G. F	Washington, Hempstead county, Ark.
Foltz, Joseph	Fort Smith, Sebastian county, Ark.
Gardner, N. E	Kenyon, Jackson county, Ark.
Halliburton, John H	DeWitt, Arkansas county, Ark.
Harris, R. D	Melbourne, Izard county, Ark.
Hamor, C. W	Fayetteville, Washington county, Ark.
Healey, Dan	Fayetteville, “ “ “
Hensley, W. B	Ozark, Franklin county, Ark.
Hurlbut, Maud	Fayetteville, Washington county, Ark.
James, W. T	Batesville, Independence county, Ark.
Jobe, Fannie	Fayetteville, Washington county, Ark.

Johnson, B.	Yellville, Marion county, Ark.
Jones, Claudius	Washington, Hempstead county, Ark.
Joyner, W. T.	Little Rock, Pulaski county, Ark.
Kennedy, Allen	White Rock, Franklin county, Ark.
Kingston, C. D.	Granby, Newton county, Mo.
Lane, H. C.	Dallas, Polk county, Ark.
Lewis, Lula	Fayetteville, Washington county, Ark.
Loy, M. C.	Fayetteville, " " "
Magness, J. W	Akron, Independence county, Ark.
May, T. B.	Clarksville, Johnson county, Ark.
Mayes, Alice	Farmington, Washington county, Ark.
Michaels, J. F.	Fayetteville, " " "
Mills, Amelia	Richmond, Little River county, Ark.
Millsaps, Nelson	Fayetteville, Washington county, Ark.
Morrow, Mattie	Fayetteville, " " "
Moseley, B. J	Eureka Springs, Carroll county, Ark.
Newsom, H. A.	Fayetteville, Washington county, Ark.
North, Nattie	Maguire's Store, Washington county, Ark
Obenshain, Ulah	Fayetteville, Washington county, Ark.
Parks, Fannie	Boonsboro, " " "
Penn, Thompson	Fayetteville, " " "
Pittman, Jennie	Fayetteville, " " "
Rose, J. M.	Clarksville, Johnson county, Ark.
Schoolfield, R. E.	Fayetteville, Washington county, Ark.
Short, Lottie	Seligman, Barry county, Mo.
Shuford, E. W.	Fayetteville, Washington county, Ark.
Smith, S. K.	Fayetteville, " " "
Teague, Sherman	Fayetteville, " " "
Thomas, Lizzie	Fayetteville, " " "
Thompson, J. B.	Russellville, Pope county, Ark.
Vaughan, Cordie	Fayetteville, Washington county, Ark.
Valentine, J. B.	Webb City, Franklin county, Ark.
Washmood, John	Little Rock, Pulaski county, Ark.
Ward, J. C.	Little Rock, " " "
Webb, Abner	New Edinburgh, Cleveland county, Ark.
Wines, Lula	Fayetteville, Washington county, Ark.
Williams, O. H	Fayetteville, " " "
Young, C. I.	Fayetteville, " " "

Total, 62.

B CLASS.

Boles, Ben	Fayetteville, Washington county, Ark.
Bond, Board	Newport, Jackson county, Ark.
Botefuehr, Fannie	Fayetteville, Washington county, Ark.
Bray, W. O.	Fayetteville, " " "
Brewer, R L.	Mountain View, Stone county, Ark.
Britton, Ella	Alma, Crawford county, Ark.
Butler, D. C.	Malvern, Hot Spring county, Ark.
Campbell, R. O.	Fayetteville, Washington county, Ark.
Carlisle, Belle	Fayetteville, " " "
Cato, Lula	Fayetteville, " " "
Cook, F. J.	Little Rock, Pulaski county, Ark.
Corley, J. B.	Bentonville, Benton county, Ark.

Curry, Lula	Ashley county, Ark.
Curry, Jennie	Ashley " "
Davis, R. H	Jacksonport, Jackson county, Ark.
Davis, Z. W	Fort Smith, Sebastian county, Ark.
Davies, Audie	Fayetteville, Washington county, Ark.
Davies, Elza	Fayetteville, " " "
Doak, J. A	Boonsboro, " " "
Fuqua, Jessie	Boonsboro, " " "
Grace, Annie V	Fort Smith, Sebastian county, Ark.
Greene, Fred	Fayetteville, Washington county, Ark.
Halliburton, Wesley	DeWitt, Arkansas county, Ark.
Hansard, Chas	Fayetteville, Washington county, Ark.
Harris, W. L	Fayetteville, " " "
Harris, J. F	Hot Springs, Garland county, Ark.
Harrison, Lida	Fayetteville, Washington county, Ark.
Jackson, Edna	Fayetteville, " " "
Johnson, W. H	Clarendon, Monroe county, Ark.
Jones, Bertie	Fayetteville, Washington county, Ark.
Juniel, Edna	Bearden, Ouachita county, Ark.
Kendrick, W. R	Melbourne, Izard county, Ark.
Lewis, Josie	Boonsboro, Washington county, Ark.
Mahan, J. D	Mulberry, Franklin county, Ark.
Maynard, Garrett	Hollywood, Clark county, Ark.
McIlroy, C. D	Fayetteville, Washington county, Ark.
Moore, Nellie	Little Rock, Pulaski county, Ark.
Morrow, S. Y	Fayetteville, Washington county, Ark.
Nix, Minnie	Fayetteville, " " "
Oliver, Wallace	Lee's Creek, Crawford county, Ark.
Perryman, R. L	Eufala (Creek Nation), In. Ter.
Phillips, R. Y	Arkadelphia, Clark county, Ark.
Reed, Maud	Fayetteville, Washington county, Ark.
Reynolds, Farie	Fayetteville, " " "
Sanderson, Berna	Fayetteville, " " "
Smith, D. D	Hot Springs, Garland county, Ark.
Turner, Jno. L	Marvell, Phillips county, Ark.
Vaughan, R. E	Fayetteville, Washington county, Ark.
Watson, Fannie	Boonsboro, " " "
West, R. E. L	Clarendon, Monroe county, Ark.
Wilson, W. W	Rock Creek, Pike county, Ark.

Total, 51.

C CLASS.

Aikin, Gertie	Fayetteville, Washington county, Ark.
Baldrige, J. R	Fayetteville, " " "
Barner, J. W	Fayetteville, " " "
Bolinger, F. A	Turner, Phillips county, Ark.
Byars, Renfroe	Alma, Crawford county, Ark.
Byrnes, Dora	Fayetteville, Washington county, Ark.
Carlisle, Annie	Little Rock, Pulaski county, Ark.
Carter, Lizzie	Fayetteville, Washington county, Ark.
Causey, Eugene	Tillar Station, Drew county, Ark.
Clinkscales, A. A	Van Buren, Crawford county, Ark.
Coates, A. D	Fayetteville, Washington county, Ark.

Coates, Jno	Fayetteville, Washington county, Ark.
Cobb, J. M	Camden, Ouachita county, Ark.
Cobbs, Anna	Forrest City, St. Francis county, Ark.
Coffer, Jos	Fort Smith, Sebastian county, Ark.
Cumby, W. M	Mouth White River, Desha county, Ark
Cummings, Lula	Hindsville, Madison county, Ark.
Cyrus, W. F	Hot Springs, Garland county, Ark.
Davidson, Lenna	Fayetteville, Washington county, Ark.
Dick, Anna	Carlisle, Lonoke county, Ark.
Fry, W. R	Hot Springs, Garland county, Ark.
Ferguson, Arthur	Fayetteville, Washington county, Ark.
Green, T. C	Barton, Phillips county, Ark.
Harrison, J. A	Okmulgee (Creek Nation), In. Ter.
Hulse, Marcus	Fayetteville, Washington county, Ark.
Hunt, Gertie	Fayetteville, " " "
Irvin, R. B	Fayetteville, " " "
Jabine, Eugene	Little Rock, Pulaski county, Ark.
Jennings, Wm	Fayetteville, Washington county, Ark.
Jennings, Lizzie	Fayetteville, " " "
Kinman, T. D	Newport, Jackson county, Ark.
Lewis, Lucius	Fayetteville, Washington county, Ark.
Maguire, Addie	Maguire's Store, " " "
Marlar, A. H	Mulberry, Franklin county, Ark.
McAlexander, Eugene	Denton, Denton county, Texas.
McIlroy, Annie	Fayetteville, Washington county, Ark.
McRoy, Julia	Fayetteville, " " "
Middleton, Maud	Fayetteville, " " "
Mitchell, J. F	Coffee Creek, Phillips county, Ark.
Moore, F. W	Fayetteville, Washington county, Ark.
Mulholland, J. W	Fayetteville, " " "
Mullins, Dora	Fayetteville, " " "
Myers, W. P	Lavaca, Sebastian county, Ark.
O'Connell, Maggie	Fayetteville, Washington county, Ark.
Pace, Henry	Fayetteville, " " "
Reynolds, W. E	Arkansas City, Desha county, Ark.
Scruggs, Godfrey	Little Rock, Pulaski county, Ark.
Shaw, G. G	Conway, Faulkner county, Ark.
Shipley, J. S	Chester, Crawford county, Ark.
Shoffner, C. L. C	Newport, Jackson county, Ark.
Smith, Leon	Fayetteville, Washington county, Ark.
Standlee, Thomas H	Amity, Clark county, Ark.
St. Clair, Geo. W	Webb City, Franklin county, Ark.
Steere, Maggie	Fayetteville, Washington county, Ark.
Van Winkle, Peter	Fayetteville, " " "
Walker, Lou	Fayetteville, " " "
Washmood, Wm. B	Little Rock, Pulaski county, Ark.
Wigley, Mittie	Mulberry, Franklin county, Ark.
Whitlock, Alice	Mulberry, " " "

Total, 59.

MUSIC CLASS.

Agee, Ella	Camden, Ouachita county, Ark.
Barton, Lizzie	Mound City, Crittenden county, Ark.
Berry, Nellie	Little Rock, Pulaski county, Ark.
Brown, Willie	Camden, Ouachita county, Ark.
Buckner, Jennie	Fayetteville, Washington county, Ark.
Carter, Lizzie	Fayetteville, " " "
Carter, Nora	Fayetteville, " " "
Carlisle, Annie	Little Rock, Pulaski county, Ark.
Cato, Lula	Fayetteville, Washington county, Ark.
Conner, Maggie	Fayetteville, " " "
Cravens, Lelia	Fayetteville, " " "
Crump, Mintie	Harrison, Boone county, Ark.
Dale, Nina	Fayetteville, Washington county, Ark.
Davies, Hadgie	Fayetteville, " " "
Dean, Maggie	Fayetteville, " " "
Duke, Annie	Fayetteville, " " "
Gates, Maria	Fayetteville, " " "
Gregg, Ida	Fayetteville, " " "
Gunter, Gertrude	Fayetteville, " " "
Edgar, Gertrude D	Fayetteville, " " "
Edmiston, Annie	Fayetteville, " " "
Hackman, Birdie	——— Colorado.
Harris, F. H	Eureka Springs, Carroll county, Ark.
Hays, T. M	Amity, Clark county, Ark.
Head, Dove	Richmond, Little River county, Ark.
Healy, Mary	Fayetteville, Washington county, Ark.
Jennings, Lizzie	Fayetteville, " " "
Jones, Bertie	Fayetteville, " " "
Juniel, Edna	Bearden, Ouachita county, Ark.
Knight, Carrie	Fayetteville, Washington county, Ark.
Lake, Ella	Prairie Grove, Washington county, Ark.
Loy, Minnie	Fayetteville, Washington county, Ark.
Maguire, Addie	Maguire's Store, " " "
McRoy, Minnie	Fayetteville, " " "
McRoy, Julia	Fayetteville, " " "
Mills, Amelia	Richmond, Little River county, Ark.
Moore, Nellie	Little Rock, Pulaski county, Ark.
Obenshain, Ora	Fayetteville, Washington county, Ark.
Pittman, Jennie	Fayetteville, " " "
Pittman, Mollie	Fayetteville, " " "
Polson, Alice	South West City, McDonald co., Mo.
Reed, Maud	Fayetteville, Washington county, Ark.
Routh, Louella	Boonsboro, " " "
Rutherford, Julia	Billingsly, " " "
Short, Lottie	Seligman, Barry county, Mo.
Slagle, Ida	Siloam, Benton county, Ark.

Stone, Amanda	Fayetteville, Washington county, Ark.
Thurman, Mary	Fayetteville, " " "
Trott, Robbie	Fayetteville, " " "
Van Winkle, Peter	Fayetteville, " " "
Vaughan, Cordie	Fayetteville, " " "
Walker, Lula	Fayetteville, " " "
Walker, Virginia	Fayetteville, " " "
Waterman, Jessica	Fayetteville, " " "
Whitlow, Mabel	Pilot Grove, Cooper county, Mo.
Wilson, Nellie	Springdale, Washington county, Ark.
Wilson, Belle	Fayetteville, Washington county, Ark.

Total 57.

ART CLASS.

Campbell, Pearl	Texarkana, Miller county, Ark.
Crump, Mintie	Harrison, Boone county, Ark.
Fuqua, Birdie	Fayetteville, Washington county, Ark.
Kemp, Elzie	Fayetteville, " " "
King, Cynthia	Fayetteville, " " "
Leverett, Ammie	Fayetteville, " " "
Pace, Ida	Fayetteville, " " "
Pettus, Ada	Cabot, Lonoke county, Ark.
Pollard, Mary	Fayetteville, Washington county, Ark.
Reed, Lina	Fayetteville, " " "
Simonds, Dottie	Fayetteville, " " "
Stone, Amanda	Fayetteville, " " "
Stone, Ab	Fayetteville, " " "
Walker, Sue H	Fayetteville, " " "
Walker, Nannie	Fayetteville, " " "

Total, 15.

GENERAL SUMMARY.

Collegiate Department	67
Preparatory Department	241
Dissatisfied with Classification and Discharged	9
Failed to Pass Entrance Examination	22
Music Class	57
Art Class	15
Total	411
Names Repeated in Music and Art	46
Net Total	365

COURSES OF STUDY.

COLLEGIATE DEPARTMENT.

The Arkansas Industrial University embraces four Technical courses and three general courses with a preparatory course as follows:

1. Agricultural Course.
2. Engineering Course.
3. Normal Course.
4. Business Course.
5. Language Course.
6. English Course.
7. General Science Course.
8. Preparatory Course.

TECHNICAL COURSES.

AGRICULTURAL.

FIRST YEAR.

English Grammar and Composition, United States History, Arithmetic, Review of Geography, Penmanship, Drawing, Practical Agriculture or Shop-work.

SECOND YEAR.

English Analysis and Composition, General History, Algebra and Geometry (commenced), Book-keeping, Drawing, Elementary Courses in Natural Science, Practical Agriculture or Shop-work.

THIRD YEAR.

Composition and Rhetoric, Algebra and Geometry (completed), Zoology, Physiology, Botany, Physics, Farm or Laboratory work.

FOURTH YEAR.

Lectures on Psychology, Ethics and Political Science, Plane Trigonometry, Surveying, Rural Architecture and Engineering, Chemistry, Agricultural Chemistry, Agriculture, Lectures on Entomology and Veterinary Science; Breeding, Feeding, and Marketing Stock; Farm Implements and Products.

The satisfactory completion of the above course will entitle the student to a diploma conferring the distinction, Graduate in Agriculture.

A post-graduate course of two years, embracing a more extended course in Chemistry, Agricultural Science, Geology, Mineralogy, English Literature, Psychology, Ethics, Sociology and Evidences of Christianity, will entitle the student to the degree of Bachelor of Arts.

ENGINEERING COURSE.

FRESHMAN CLASS.

Composition and Rhetoric, Geometry, Algebra, Zoology, Botany, Physiology, Physics, Free-hand Drawing and Shopwork.

SOPHOMORE CLASS.

Modern History, Physics, Chemistry, Plane and Spherical Trigonometry, Surveying, Mechanical Drawing, Field and other Practical Work.

JUNIOR CLASS.

English Literature, Mineralogy, Geology, Analytical and Descriptive Geometry; Shades, Shadows and Perspective; Calculus, Field Engineering (embracing location of roads, estimates of cuts, fills, trestles, tunnels, abutments and piers, manipulation and adjustment of instruments). Field Work.

SENIOR YEAR.

Psychology, Ethics, Sociology, Evidences of Christianity, Political Economy, Constitutional Law, Astronomy, Calculus, Civil Engineering (embracing strength and durability of materials, theory of strains, applied to roofs, bridges and masonry; foundations on land and in water and the different kinds of masonry, bridges, roads and canals), Practical Applications of Principles of Engineering.

The satisfactory completion of the above course will entitle the Student to a diploma conferring the degree of Civil Engineering.

NORMAL COURSE.

FIRST YEAR.

English Grammar and Composition, Latin, Arithmetic, United States History, Review of Geography, Penmanship, Methods in Reading and Number, Elementary Pedagogics, Industrial Art.

SECOND YEAR.

English Analysis and Composition, Latin, Book-keeping, Algebra and Geometry (commenced), Elementary Courses in Natural Science, Methods in Geography, Grammar and Composition, Theory and Practice of Teaching, Industrial Art.

THIRD YEAR.

Composition and Rhetoric, Latin, Algebra and Geometry (completed), Zoology, Physiology, Botany, Lectures on Organization, Classification and Discipline of Schools, Industrial Art.

FOURTH YEAR.

Ancient and Modern History, Latin, Plane Trigonometry, Surveying, School Law, Lectures on Psychology, Ethics and Political Science, Observation and Practice in Training Schools, History of Education, and General Review.

The satisfactory completion of the first two years' course (with or without Latin), will entitle the student to a Certificate of Proficiency in the branches taught in the District Schools.

The satisfactory completion of the four years' course, will entitle the student to a diploma, conferring the distinction, Graduate in Normal Department.

A post-graduate course of two years, embracing Chemistry, Physics, Mineralogy, Geology, Latin, Spherical Trigonometry, Analytical Geometry, Calculus, English Literature, Astronomy, Psychology, Ethics, Sociology, Evidences of Christianity, Political Science and Philology, will entitle the student to the degree of Bachelor of Arts.

BUSINESS COURSE.

FIRST YEAR.

English Grammar and Composition, United States History, Arithmetic, Review of Geography, Penmanship, Industrial Art.

SECOND YEAR.

English Analysis, Rhetoric and Composition, General History, Algebra, Geometry, Book-keeping, Elementary Courses in Natural Science, Commercial Law and Lectures in Psychology, Ethics and Political Science.

The satisfactory completion of the above course will entitle the student to a diploma, conferring the distinction, Graduate in Commercial Science.

GENERAL LITERARY AND SCIENTIFIC COURSES, LEADING TO THE DEGREE OF A. B.

	LANGUAGE COURSE	ENGLISH COURSE	GENERAL SCIENCE COURSE
Freshman Class	Composition and Rhetoric	Composition and Rhetoric	Composition and Rhetoric
	Geometry	Geometry	Geometry
	Algebra	Algebra	Algebra
	Latin or Greek, or	Zoology	Zoology
	German and French	Botany	Botany
	Physiology	Physiology	Physiology
	Physics	Physics	Physics
	Industrial Art	Industrial Art	Industrial Art
Sophomore Class	Ancient and Modern Hist'y	Ancient and Modern Hist'y	Ancient and Modern History
	Plane and Spherical Trigo'y	Plane and Spherical Trigo'y	Plane and Spherical Trigonom'y
	Surveying	Surveying	Surveying
	Latin or Greek, or	Physics	Physics
	French and German	Chemistry	Chemistry
	Chemistry		
	Industrial Art	Industrial Art or Lab. Work.	Industrial Art or Labo't'y Work
Junior Class	Rhetoric	Rhetoric	
	English Literature	English Literature	English Literature
	Logic	Logic	Logic
	Analytical Geometry	Analytical Geometry	Analytical Geometry
	Calculus	Calculus	Calculus
	Latin or Greek, or		Analytical Chemistry
	German and French		
	Mineralogy	Mineralogy	Mineralogy
	Geology	Geology	Geology
	Industrial Art	Industrial Art	Laboratory Work
Senior Class	English Literature	English Literature	Applied Chemistry
	Calculus	Calculus	Calculus
	Latin or Greek, or		
	French and German	Astronomy	Astronomy
	Astronomy	Psychology	Psychology
	Psychology	Ethics	Ethics
	Ethics	Sociology	Sociology
	Sociology	Evidences of Christianity	Evidences of Christianity
	Evidences of Christianity	Political Economy	Political Economy
	Political Economy	Constitutional Law	Constitutional Law
	Constitutional Law	Philology	Meteorology
	Philology	Meteorology	Philology

The term "Industrial Art," as above used, includes free-hand drawing, original designing, and the working out of the design in any material. It includes not only the various kinds of shop-work in wood and metal appropriate for boys, but work in wood, brass, leather, clay, papier-mache; also, stenciling, needle-work and all forms of decorative painting suitable for girls.

REQUIREMENTS FOR ADMISSION.

For admission to the Freshman Class in the General Courses and in the Engineering Course, students will be required to pass a satisfactory examination on all the studies of the correlated course of the Preparatory Department.

OUTLINE OF STUDIES.

PSYCHOLOGY, ETHICS, SOCIOLOGY, AND EVIDENCES OF CHRISTIANITY.

These important studies are taught inductively, no theory or doctrine being urged for acceptance which is not based upon a philosophical induction from the facts of consciousness. The student is taught to subject every statement of fact or principle to the test of his own experience. The fullest and freest discussion of opposing views is encouraged.

TEXT AND REFERENCE BOOKS.

Psychology—Bascom, Mahan, Porter, Sir William Hamilton.

Ethics—Alexander, Dagg, Bascom, Porter, Calderwood.

Sociology—Lectures.

Evidences of Christianity—Alexander, McIlwain, Butler.

ANCIENT LANGUAGES AND ANCIENT HISTORY.

LATIN AND GREEK.

The mode of instruction is by translations from the textbook into English, and from English into Latin and Greek. The principles and idioms of the languages are carefully studied, with a view to a better acquaintance with the principles of the English speech.

Due prominence is given to Latin and Greek composition and also to the Literature of Greece and Rome.

Candidates for admission to the Freshman class must come well drilled in Harkness' Grammar and Reader, Latin and Greek, or their equivalents, and must have read two books of Cæsar's Commentaries and two books of Xenophon's Anabasis.

TEXT-BOOKS.

LATIN—FRESHMAN CLASS.

Cæsar—Third and Fourth Books.
Æneid—Six Books.
Cicero's Orations Against Citiline.
Exercises in Latin Composition.

SOPHOMORE CLASS.

Horace—Odes, Epodes and Selections from Satires and Epistles, Juvenal.

JUNIOR CLASS.

Livy—Three Books. Tacitus—Germania, Agricola and Selections from the Annals.

SENIOR CLASS.

Selections from Cicero's Works.
Critical Essays.
Pliny's Letters.

GREEK—FRESHMAN CLASS.

Xenophon's Anabasis (completed).
Harkness' Greek Composition.
Exercises in writing Greek.

SOPHOMORE CLASS.

Homer (Selections from Iliad).
Exercises in writing Greek.
Herodotus (selections).

JUNIOR AND SENIOR CLASSES.

Demosthenes (public orations).
Selections from the Lyric Poets.
Aristophanes—Essays.

ANCIENT HISTORY.

Instruction in this department extends through the Sophomore year. It is given with the aid of a classical atlas, and is chiefly designed to impart an accurate knowledge of the events of the period of classical literature.

Text-Books: To be indicated hereafter.

Books of Reference: Liddell's Rome, Brown's Roman Literature, Smith's History of Greece, Appleton's Classical Atlas.

ENGLISH, FRENCH, GERMAN, MODERN HISTORY AND POLITICAL SCIENCE.

ENGLISH.

After having been thoroughly drilled in English Grammar and Analysis and in the art of Composition, in the Preparatory Department, the student, in the Collegiate Department, is introduced to Elementary Rhetoric, with the object of teaching him to express his thoughts with elegance as well as accuracy; and is, subsequently, advanced to its higher treatment as the Science of Discourse. He is then ready to enter with profit and pleasure upon the study of the History of English Literature, and of the master-pieces of English Composition.

Text-Books: Abbott's How to Write Clearly; A. S. Hill's Rhetoric; D. J. Hill's Science of Rhetoric; Shaw's English Literature, Marsh and Max Mueller; Study of Standard Authors.

FRENCH AND GERMAN.

The object is to impart to the student such a familiarity with the idioms and vocabularies of the two languages as will enable him to read them with facility, and to attain no inconsiderable use of them colloquially. Throughout the course much attention is given to both oral and written translations from the English. The authors selected for class use will vary somewhat from year to year. In all classes the text-books in use will be supplemented by the notes and lectures of the professor.

Text-Books—French: Joyne's Otto's Lessons and Reader, Otto's Conversation Grammar, Classic and Modern Authors. *For reference*—Borel's Grammaire Francaise, Brachet's Historical Grammar, Masson's or Gasc's Dictionary. *German:* Whitney-Klemm German by Practice, Buchheim's Reader, Boisen's German prose, Classic and Modern Authors, Whitney's Grammar, Whitney's Dictionary.

MODERN HISTORY.

It will be the aim in this department to study the moral, social and political forces which have operated in the development of national life, and to apply the lessons thus learned to the solution of the social problems of our own time.

Text-Books: To be indicated hereafter.

POLITICAL SCIENCE.

Political Economy and Constitutional Law are embraced under this head.

The aim is to give a succinct statement of the undisputed principles of Political Economy, and to discuss conflicting views with all possible fairness.

The Constitution of the United States and of Arkansas, will be carefully studied, and an effort made to form a correct idea of the principles upon which our government was founded by a careful study of its history and institutions.

PURE MATHEMATICS AND LOGIC.

MATHEMATICS.

For admission into the Freshman class, students must pass a satisfactory examination in Arithmetic and in Algebra as far as Equations of the Second Degree.

The Freshman class will complete Algebra and will begin Geometry. The Sophomore class will complete Geometry and will study Trigonometry not less than two terms.

The Junior class will complete Analytical Geometry and will begin Calculus. The Senior class will complete Calculus.

Text-Books—Wentworth's Complete Algebra, Schuyler's Geometry and Trigonometry, Loomis' Analytical Geometry and Calculus.

Surveying is studied by all students in the regular courses, but is usually taught by the Professor of Applied Mathematics.

LOGIC—

Inductive and Deductive—is studied in the Senior year.

Text-Books and Reference Books—Jevons' Deductive and Fowler's Deductive and Inductive Logic.

APPLIED MATHEMATICS—PHYSICS, ASTRONOMY, CIVIL ENGINEERING AND TACTICS.

PHYSICS.

This course, which forms the basis of all future scientific study and technical instruction, embraces: Recitations upon text-books and lectures, with class illustrations, experiments in Physical Laboratory, in which the student uses the instruments in testing the principles taught.

Text and Reference Books: Avery, Gage, Ganot, Miller, Frick.

ASTRONOMY.

Descriptive Astronomy is taught with the aid of a text-book. The study of the Heavens will be made interesting and profitable by the use of maps, globe and astral lanterns. A fine equatorial telescope has recently been purchased.

CIVIL ENGINEERING.

The work proper begins with the Sophomore class, and is divided as follows:

1. Surveying.
2. Field Engineering.
3. Civil Engineering.

Surveying embraces the theory and practice of both the common and rectangular systems of land surveying; the description and use of the instruments; plotting and map making; the sub-dividing of land, and calculation of its area; the re-running and connection of old surveys, and triangulation.

Field Engineering includes the theory and practice of Engineering as applied to roads of all kinds, but especially to railroads, in making actual surveys, locations and an estimate of quantities for cuts, fills, trestles, tunnels, culverts, drains, etc; in slope staking and staking out foundations for culverts, abutments, piers etc; and in the manipulation and adjustment of all the field instruments.

In Civil Engineering there is taught the relative strength and durability of both natural and artificial building materials; the theory of strains applied to roofs, bridges and masonry; foundations on land and in water; and the different kinds of masonry, bridges, roads, railroads, and canals.

The department is thoroughly furnished with the latest and most improved field instruments and all its students are required to familiarize themselves with their uses.

Text and Reference Books: Davies' Land Surveying; Gillespie's Land Surveying; Surles' Field Engineering; Wilson's Mines and Mine Ventilation; Gillespie's Roads and Railroads; Voss' Manual for Railroad Engineers; Wheeler's Civil Engineering; Mahan's Civil Engineering; Rankin's Civil Engineering; Shreve's Strength of Bridges; Wood's Resistance of Materials; Wood's Construction of Bridges.

CHEMISTRY, MINERALOGY, GEOLOGY AND BIOLOGY.

CHEMISTRY.

This course embraces inorganic, organic, analytical, agricultural and industrial chemistry. Instruction will be given by means of text-books, lectures, class illustration, and laboratory practice. The elementary principles of chemistry and chemical philosophy will be thoroughly taught, and the facts of chemistry will be impressed by copious experiments performed by the student. Blowpipe analysis, qualitative and quantitative analysis, assaying and metallurgy will be taken up in proper order. After completing a suitable course of laboratory practice, the further practical study of chemistry by the student will be determined by the object he may have in view.

Text and Reference Books: Appleton's Series, Avery, Clowe, Harcourt, Fresenius, Lupton, the Johnsons, Church, Rickets, Phillips, Wagner, Wurtz, Miller, Crook & Rohrig, Watt, Liebig.

MINERALOGY.

This includes the study of crystallography with the occurrence, properties, forms and uses of the principal minerals. Determinative mineralogy forms an important part of the course, and is studied by the aid of lens, blowpipe and simple analysis. Especial attention will be given to Arkansas minerals.

Text and Reference Books: Dana, Brush, Plattner.

GEOLOGY.

This includes lithological, historical and dynamical Geology. Prominence will be given to facts having an economic bearing. Especial attention will be paid to the formation of soils and deposits of valuable minerals in Arkansas. Field excursions will form part of the regular course.

Text and Reference Books: LeConte, Dana, Geike, Lyell.

BIOLOGY.

This includes Botany, Anatomy and Physiology, Zoology and Entomology. Under *Botany* will be studied the structure, analysis and classification of plants—their geographic distribution and importance; favorable and unfavorable conditions for life and growth; enemies, food, etc. *Anatomy and Physiology* will embrace the study of human anatomy, physiology and hygiene, including such subjects as digestion and foods, poisons and antidotes, respiration and ventilation, exercise and clothing. Under *Zoology* will be studied the classification and distribution of the forms of life upon the globe. Comparative Anatomy and Physiology, as preparatory to the study of stock-breeding, will receive especial attention. *Entomology* will be studied with special reference to its economic relations with agriculture and horticulture. In the biographical sciences, instruction will be given by text-book and lectures, but all students will be required to perform simple dissections and work with the microscope; prepare, mount and preserve specimens properly classified and labeled. The University is well equipped with microscopes, specimens and models.

Text and Reference Books: Gray, Bessey, Chapman, Martin, Huxley, Dalton, Carpenter, Flint, Darwin, Packard, Harris.

NORMAL DEPARTMENT.

The design of the Normal department is to train teachers for the schools of the State. It will be the aim, in future, to make this one of the prominent features of the University and so to co-ordinate its instruction to both the Preparatory and the Collegiate departments as to make its benefits accrue to all grades of teachers, from the primary teacher to the college professor. The aims will be:

1. To lead pupils to think and investigate for themselves.
2. To train them in the best methods of imparting instruction without destroying their individuality.
3. To teach them how to organize, grade and discipline the various kinds of schools.
4. To give them a knowledge of school law, and especially of the duties of teachers as officers of the State.

5. To report to them a valuable summary of the history of education.

6. To teach them the fundamental principles of Psychology and of the science of human conduct.

PREPARATORY DEPARTMENT.

Students are not admitted into this department until they have become thoroughly familiar with the fundamental principles of Arithmetic, viz: Addition, Subtraction, Multiplication and Division, and also Common Fractions. In Reading, they must be able to understand and intelligently render specimens of the grade of the Fourth Reader; must have a knowledge of Primary English Grammar, Primary Geography, the rudiments of Penmanship, and the spelling of ordinary words of the grade of the Fourth Reader. These qualifications are the test of admission at the beginning of the session; those applying later will be admitted only on the grade of the class.

In Reading, the aim will be, first to develop in the student a full, complete and definite idea of the meaning of the sentence; second, to obtain from the student a natural, easy and graceful expression of the entire thought, as embraced in the sentence.

Spelling will be required of students throughout the entire course, and an endeavor made to secure the accurate use of letters and other marks in the formation of words, and correct pronunciation.

English Grammar will be taught by requiring the students to form sentences of their own, as well as to analyze and parse those of others. Thus Grammar and Composition will go hand in hand. The student will gradually be led from the simplest constructions to the most difficult and abtruse.

In Arithmetic, processes precede principles, and the object will be to obtain, first, a full understanding of methods, then accuracy in work, and finally, rapidity.

Much importance is attached to Mental Arithmetic as a means for developing the power of analysis and for strengthening the mind. Both oral and written exercises will be required daily.

In Commercial Arithmetic, the effort will be made to make the instruction as practical as possible, so as to prepare the student for a correct understanding of every-day business transactions.

Daily exercises in Penmanship are required.

In Geography, the effort will be to teach what is practically useful. With this in view attention will chiefly be given to the natural features of the earth, its climatic conditions, the resources and products of the various countries, the great thoroughfares of commerce, and the localities of chief general interest. Map drawing will be an essential of this course.

In Algebra, students are thoroughly drilled in the elementary principles and required to master everything to equations of the second degree.

Plane Geometry, will hereafter be taught in this department as its elementary principles, at least, are necessary to a proper basis of instruction in Industrial Art.

Free-hand Drawing forms a part of the regular curriculum and is begun in this department. Drawing has a disciplinary, as well as a practical value, and also tends to refine the taste and polish the mind.

The History of the United States is taught in the higher classes of this department. Students who propose to take a classical course begin it here.

The course in Latin includes a thorough mastery of the first and second books of Cæsar's Commentaries, as well as the principles of the grammar.

In Greek the year is devoted to a mastery of inflections and elementary construction. Students are exercised by frequent translations from English into Greek and Latin.

In view of the thorough reorganization which the institution is now undergoing, it is deemed best not to designate the text-books until the beginning of the session.

MUSIC DEPARTMENT.

PIANO FORTE.

This course will require six years for completion. Should the pupil possess marked talent and unceasing energy, it may be finished in less time.

FIRST YEAR.

Studies of the first principles of Music, five-finger exercises, movement, scales, and such studies as will prepare the pupil for light classic composition of the Old Masters.

SECOND YEAR.

Practical exercises of Duvernoy, Czerny and Bach; introduction of such new movements of Liszt and Chopin as will prepare the pupil for work exclusively classic.

THIRD AND FOURTH YEARS.

Studies of Clementi, Heller and Bach, with especial attention to touch; introduction of more advanced movements of Liszt, that the pupil may be enabled to contend successfully with the moderately difficult classic compositions.

FIFTH AND SIXTH YEARS.

Advanced studies of Beethoven, Clementi and Cramer, and difficult compositions of Schumann, Liszt, Chopin, Hayden, etc.

VOCAL CULTURE.

FIRST YEAR

Will be devoted exclusively to forming of register and to producing evenness and natural tones of voice in register. Bassini's Art of Vocalization will be the theory used.

SECOND AND THIRD YEARS.

Pronunciation, timbre, science and art of breathing (diaphragm and clavicular), and art of phrasing; studies of Conconi and Bassini, with light selections from the Operas.

FOURTH AND FIFTH YEARS.

Colature, Messa di Voco, Portamento, and other vocal embellishments; studies of Garcia, Conconi, Rossini, etc., with the more difficult selections from the operas and classic compositions of Mendelssohn and others.

SIXTH YEAR

Will embrace the first course in Opera Dramatic.

VIOLIN.

FIRST YEAR.

Practice of bowing, finger exercises, Manzas' Instructor.

SECOND YEAR.

Etudes of Dancla and arrangements from the Operas.

THIRD YEAR.

Kaiser's Etudes, Sonatas by Hayden, Schubert, etc.

FOURTH YEAR.

Krautzer's Etudes and compositions by De Beriot, Kreutzer, etc.

TERMS.

TWO LESSONS PER WEEK.

Piano-forte, primary pupils	$13 00	per term.
Piano-forte, advanced pupils	15 00	"
Voice Culture, private lessons	18 00	"
Violin, private lessons	15 00	"
Thorough Bass and Harmony	12 00	"
Theory and Composition	16 00	"
Use of Piano one hour per day	3 50	"

One-half of tuition must be paid in advance, balance at the end of term.

No deductions will be made on account of absence from recitations, except in cases of prolonged sickness; then the loss will be shared equally between student and teacher.

INDUSTRIAL ART STUDIES.

These studies embrace drawing, designing, modeling, working in wood, metal, clay and other substances. They teach the art of producing an infinite variety of objects, both useful and ornamental; in short, *whatever lies at the foundation of the industries dependent alone upon human invention, skill and handiwork.*

It is surprising that it has been only in the last few years that the importance of training the eye, hand and judgment of youth in apprehending and working material things for pleasure and profit, has begun to be appreciated; and that our systems of education are being remodeled to include the aim of learning "to do" something as well as "to know" something.

How this double aim can best be accomplished, is the great educational problem of the day. The good results that have already been realized from the efforts made in Europe and in our own country, to solve this problem, are highly encouraging; and it is confidently believed that the " New Education," in which manual training shall go *pari passu* with the intellectual and the moral, in all grades of schools from the kindergarten to the university, will be the education of the future.

The Board of Trustees of the Arkansas Industrial University have determined to make a beginning in Industrial Art training at the opening of the next session, and have modified their curriculum so as to provide for appropriate instruction for both sexes in manual exercises.

MILITARY DEPARTMENT.

This department is designed to impart to each male student not physically incapacitated to bear arms, theoretical and practical instruction in the school of the soldier, of the company, and of the battalion, and thereby furnish the State with a body of young men qualified to organize its militia.

Besides, the military drill is a superior health-giving exercise and promotes physical development, manly carriage, neatness, precision, order, and a habit of obedience which is a valuable aid in the enforcement of discipline.

The entire body of male students is divided into companies, which are officered by cadets, selected for proficiency in drill, good deportment and scholarship. The cadet officers are regarded as assistants in the enforcement of discipline, and their orders, while on duty, are considered as duly authorized, and must be obeyed accordingly.

Cadet officers are expected and required to be examples in military deportment and general good conduct.

A neat uniform, with brass buttons and suitable trimmings, will be required to be worn by all males.

Arrangements will be made during the Summer to have neat uniforms supplied at appreciably lower rates than formerly, so as to be within the reach of the poorest student.

Parents and guardians will save money by postponing the purchase of winter suits for their children and wards until they arrive at Fayetteville.

CADET OFFICERS.

STAFF.

C. D. Woolverton, *1st Lieu. and Adjutant.*

W. H. Woodall, *1st Lieu. and Quartermaster.*

W. R. Vaughan, *Sergeant Major.*

"A" COMPANY.

J. W. Howell, *Captain.*

A. M. Smith, *1st Lieutenant.*

——————, *2d Lieutenant.*

H. D. Wilkinson, *1st Sergeant.*

F. A. Hippolite, *2d Sergeant.*

A. V. Gibson, *3d Sergeant.*

A. B. Stone, *1st Corporal.*

D. C. B. Aiken, *2d Corporal.*

G. A. Hillhouse, *3d Corporal.*

W. R. Bates, *4th Corporal.*

"B" COMPANY.

E. B. Kinsworthy, *Captain.*

B. J. Tillar, *1st Lieutenant.*

J. H. Bates, *2d Lieutenant.*

T. H. Humpreys, *1st Sergeant.*

W. E. Dickson, *2d Sergeant.*

B. C. Duffie, *3d Sergeant.*

H. J. Hall, *1st Corporal.*

J. M. Mason, *2d Corporal.*

G. V. Skelton, *3d Corporal.*

J. C. McNeely, *4th Corporal.*

At the competitive drill during Commencement Week, "A" Company won the honor of carrying the Battalion colors during the session of 1885–86.

GENERAL INFORMATION.

The aims of the University are set forth in the following sections of the Acts of Congress and of the General Assembly of Arkansas under which it was established:

The Act of Congress of 1862, appropriating lands to establish colleges in the states, provides that all moneys derived from their sale, "shall be inviolably appropriated by each state which may take and claim the benefit of this Act, to the endowment, support, and maintenance of at least one college, where the leading objects shall be, *without excluding other scientific and classical studies*, and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts, in such manner as the legislatures of the states may respectively prescribe, in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions of life."

(U. S. Statutes, Vol. 61, Stat. 7, Sec. 4.)

Our own General Assembly, in accepting the original grant and in creating the University, provides that the fund realized therefrom, "shall be forever devoted and applied to the endowment and maintenance, under such laws or articles of incorporation as may be by the General Assembly hereafter provided, of an institution of learning to be styled, 'The Arkansas Industrial University,' wherein shall be taught *in addition to the usual course of study prescribed in Universities*, the science and practice of Agriculture, the Mechanic Arts, Engineering and Military Science and Tactics." (Act of July 23, 1868.)

It was clearly the purpose of Congress in the Act above quoted to provide for the maintenance of colleges, whose leading objects should be "to teach such branches of learning as are related to Agriculture and the Mechanic Arts;" but the Act as plainly provides that the course of instruction shall include "Military Tactics" and shall not exclude "other scientific and classical studies." It, therefore, admits of the organization of schools upon a broad University basis, provided their leading objects shall conform to the letter of the law as already indicated; for, when thus organized, will they most surely "promote the liberal and practical education of the industrial classes in the several *pursuits and professions of life*." How they should be made to subserve the ends designed, was wisely left to "the legislatures of the states to prescribe." In accepting our State's quota of the land scrip and in chartering the Arkansas Industrial University, the General Assembly evidently designed that the "usual course of studies prescribed in Universities" should be the main feature of the institution, though in addition thereto, it provided for the other features mentioned in the closing sentence of the Act.

It is the purpose of the Board of Trustees to endeavor to develop the institution in accordance with the spirit of the above Acts. Many of the "branches of learning" "related to Agriculture and the Mechanic Arts," have for years been embraced in its curriculum; and they propose to add the teaching of the practical principles and handicraft involved in these great departments of human industry, as rapidly as the income of the institution will allow. An appropriation of $4000 was made at the recent meeting of the Board, July 3d, to establish a carpenter's and joiner's shop; to more fully equip the laboratories, with a view both to general instruction and agricultural experimentation, and to afford instruction for the girls in domestic and other industrial arts.

It is hoped that the steps taken in this direction may encourage the next legislature to make liberal appropriations for these purposes so that our University may not be behind similar institutions in the older and more favored states, in the facilities she offers for the training suited to the varied wants of her youth.

LOCATION.

The Arkansas Industrial University is located within the corporate limits of the town of Fayetteville, Washington county. The location is thought to be unsurpassed by any other locality in the State, in salubrity of climate, beauty of surrounding scenery, fertility of soil, variety and perfection of agricultural and horticultural productions, and in the morality and intelligence of its people.

PROPERTY.

The property of the University consists of the proceeds of the munificent grant of land by Congress, the bonds of Washington county, and of the town of Fayetteville, the appropriations made by the State, and the University farm and lands—amounting in all to $300,000 in value.

ACCESSIBILITY.

Students may reach Fayetteville from both the north and the south by daily trains on the Arkansas branch of the St. Louis & San Francisco Railroad, which now connects on the south with the Little Rock & Fort Smith Railroad at Van Buren.

Students, on arriving at Fayetteville, must report at once to the President of the University. No student will be allowed to recite in any class until properly enrolled, but will be held responsible for his conduct from the time of his arrival in Fayetteville.

CALENDAR FOR THE SCHOLASTIC YEAR 1885–86.

The session will commence on Tuesday, September 1, 1885, and close June 12, 1886.

The enrollment of new students will begin on the 31 of August.

WITHDRAWAL OF STUDENTS.

Parents, or guardians, who wish to withdraw their children or wards from the University, should write to the President of the Faculty, stating their wishes. Unworthy students sometimes deceive the Faculty by pretending that their parents desire them to return home. No honorable discharge will be given to a student under age, who is unable to produce the written application of his parent or guardian for his withdrawal. Nor will an honorable discharge be given to a student under censure of any kind, whether for neglect of study, neglect of duty, or other cause, even though he may have the consent of his parent or guardian for his withdrawal from the University.

RESTLESSNESS.

The greatest obstacle today, in the way of successful educational work, is the restlessness and lack of persevering pluck in American youth. We find that the vast majority of our students do not come to the University with any thought of remaining until graduation, and many think they have accomplished wonders by remaining a single term of three months. Those who exhibit such a deplorable lack of pertinacity in youth, can scarcely be expected to succeed in after life. They will succumb under the first serious difficulty. Parents who yield to the importunities of their children to quit school, because of some discouragement, do thereby foster in them a weakness which must be fatal to all vigorous manhood and healthful development. We hope that the students who come up in September, will come with the determination to let no slight impediment turn them back from the path that leads to knowledge, honor and usefulness.

BOARDING HOUSES.

Students are required to board at such places as are approved by the Faculty, and are under the supervision of the President of the University. No change of boarding house will be allowed, except at the end of each term, unless under extraordinary circumstances, nor without the permission of the President.

If at any time the influence of a boarding house be found pernicious, boarders will be removed at the instance of the Faculty.

EXPENSES.

Board, including fuel, lights and washing, may be had with families living in or around Fayetteville at from $12 to $16 per calendar month. Day boarding is sometimes obtained at from $8 to $10 per month.

In order to lighten the expenses of students of limited means, the Board of Trustees, at its recent meeting, authorized the Faculty to open a boarding house on the college grounds, where good substantial fare may be furnished to from forty to fifty boys at cost. It is believed that the cost of board may be reduced to $8 per month. Students who board on the grounds will be expected to provide their own furniture and supply their own fuel and lights. They will be required to conform to such regulations as to study, the preservation of order and the care of their rooms as may be prescribed by proper authority.

It is designed to organize a similar college boarding-house for young ladies as soon as the legislature supplies the requisite means. At present there is no suitable house available for the purpose.

Hereafter, all students, whether in the Collegiate or Preparatory classes, who have not Normal or Beneficiary appointments, will be required to pay a tuition fee of $30 per session of forty weeks—one half at the beginning and the balance in the middle of the session.

All Normal and Beneficiary students and all *new* students, on entering, are required to pay a matriculation fee of $5.

No student will be enrolled till all fees are paid, and no tuition fees will be refunded, except in cases of sickness causing continuous absence of not less than six weeks.

Hereafter, the usual fee of $5 will be charged those who receive diplomas.

POCKET MONEY.

The faculty would advise parents to allow their sons but little pocket money. It has been well said in regard to students, that "a pocket full of money and a head full of sense are seldom found together." Money can be sent monthly for the payment of boarding and other necessary expenses. Postal orders can always be cashed at the post-office in Fayetteville. The President of the Faculty cannot personally take charge of the financial affairs of students.

LITERARY SOCIETIES.

In the Collegiate Department there are two literary societies, the "Mathetian" and "Philomathean." Preparatory students who are members of the highest Preparatory class, are also eligible to membership in these.

Mr. B. H. Stone, of Fayetteville, gives annually a gold medal, valued at $25, for the best essay written by a student of the University. The Faculty of the University selects the subject and prescribes the method of competition. Hereafter this medal will not be awarded, unless there are at least five competitors for it.

Gold medals are also awarded by each of the Literary Societies for the best oration by a gentleman and the best essay by a lady.

LIBRARY AND READING ROOM.

The University Library, containing 2433 volumes, comprises some valuable works, and additions are constantly being made. Nearly all the newspapers of the State are kept on file in the Library, and students have access to them, as well as to the books, at certain hours each day. No Library fee is charged. Books can be taken from the Library, under proper restrictions, by the students.

The following named papers and periodicals have been furnished to the Library of the University, either by the publishers or by friends of the University:

Fort Smith Elevator.
Russellville Democrat.
Southwestern Presbyterian.
Arkansas Beacon.
Weekly Arkansas Gazette.
Arkansas Democrat.
Batesville Guard.
North Arkansas Pilot.
Ozark Democrat.
Monticellonian.
Harrison Times.
Musical Record.
Arkansas Sentinel.
Log Cabin.
Sun (Ozark).
New Departure.
Engineering and Mining Journal.
Pine Bluff Press-Eagle.
Camden Beacon.
New Bentonian.
Headlight.
White River Journal.
Southern Patriot.
Wittsburg Chronicle.
Springdale Yellow Jacket.
Rural and Workman.
Monroe County Sun.
Booneville Enterprise.
Southern Standard.
St. Francis County News.
Weekly Sentinel.
Paris Express.
Woodruff County Vidette.
Van Buren Argus.
Home and Farm.

Puck.
Jackson County Herald.
Ledger-Democrat.
Des Arc Citizen.
Washington Press.
Columbia Record.
Nashville News.
Brinkley Argus.
Baxter County Citizen.
Arkansas Beacon.
Springdale Journal.
Van Buren Daily Optic.
Fayetteville Evening Call.
Arkansas Teacher.

THE FOLLOWING IS A LIST OF PERIODICALS PURCHASED FOR THE LIBRARY.

St. Nicholas, (monthly).
Littell's Living Age, (weekly).
Popular Science Monthly.
Harper's Monthly.
The Century, (monthly).
Scientific American, (weekly).
Chemical News, (weekly).
American Naturalist, (monthly).
Le Francais, (monthly).
Education, (bi-monthly).
Van Nostrand's Engineering Magazine, (monthly).
The Nation, (weekly).
Atlantic Monthly.
Wide Awake, (monthly).
The Voice, (monthly).
The North American Review.

SUMMARY—PERIODICAL LITERATURE.

Magazines,	16
Magazines—weeklies,	8
Newspapers,	41
Books Purchased for Library,	256

DONATIONS TO THE LIBRARY.

During the year ending June, 1885, by

United States Government—Valuable Government Documents and Reports, 32 volumes.

Col. F. H. Van Hoose, Fayetteville—1 volume.

APPARATUS AND MUSEUM.

The University is supplied with no inconsiderable amount of apparatus for illustrating the different scientific departments and for the prosecution of original work.

Appropriations are made by the Board of Trustees, annually, for the purchase of additional supplies.

CABINET AND MUSEUM.

The cabinet of minerals consists of a collection of State minerals, contributed by various parties of the State, and by the Professors.

It is hoped that the day is not far distant when, by exchange and purchase, the institution will secure an ample supply of specimens for the illustration of the minerals and fossils of our own and other countries.

There has been constructed an herbarium case large enough to hold the indigenous plants of North America and such exotics as are of economic value. It will be the work of years to complete a collection of the plants of North America, but the work is progressing.

There are about five hundred species of animal specimens, to illustrate the various departments of Zoology.

Collections in all the departments are slowly accumulating.

The Scientific Departments of the University are under obligations to the officials of the railroads of the State, for free transportation of specimens for the Museum and Cabinets, and also for passes issued to the Professors, enabling them to make collections for the University in remote parts of the State.

APPOINTMENTS OF BENEFICIARIES.

All appointments should be completed, if possible, before the opening of the autumn term. The County Judges, who make the appointments, should prepare duplicate notifications of appointments, one of which should be forwarded to the President of the University, and one to the Secretary of the Board of Trustees; and in case the appointee fails to appear at the University within twenty days after appointment (except in case of sickness), he or she will be regarded as having declined the appointment, in which case it will be the duty of the President of the faculty to notify the person making the appointment of such failure, and he, in turn, should make another appointment as soon thereafter as possible; such other appointee being required to appear at the University as soon as possible after appointment. The President of the Faculty shall continue to notify appointing officers until their respective number of appointees make their appearance at the University.

All beneficiary and normal students should be present at the opening of the autumn term; and unnecessary delay, either of old students in returning, or new ones reporting, will lead to the forfeiture of their appointments.

QUALIFICATIONS.

The attention of County Judges is called to the fact that *neither Normal nor Beneficiary Students will be admitted, unless they have the following qualifications:*

Students are not admitted until they have become familiar with the fundamental principles of Arithmetic, viz: addition, subtraction, multiplication and division, and also of common and decimal fractions. In reading, they must be able to understand and intelligently render specimens of the grade of the Fourth Reader, must have a knowledge of primary English grammar, primary geography, the rudiments of penmanship, and the spelling of ordinary words of the grade of the Fourth Reader. These qualifications are the test of admission at the beginning of the session; those applying later wlll be admitted only on the grade of the class.

The sole object of the Normal Department being the training of teachers for the public schools of the State, the attention of County Judges is respectfully called to the following considerations:

Only such persons should be appointed to this Department as really intend to teach, and, if possible, those who have had some experience in teaching.

All who enter this department will be required to take the course of training prescribed, to fit them for teaching.

APPOINTMENT FORMS.

As much trouble and annoyance is caused by students who have been appointed as Beneficiaries or Normals coming without any evidence of appointment, the following are adopted as the proper forms of notice to be given by the Judge of County Court to the President of the University and the Secretary of the Board of Trustees, upon the appointment of Beneficiary and Normal Students by the County Court, or the Judge thereof, in accordance with the sixth section of an Act approved March 6, 1875:

[*Form 1.—Appointment.*]

No................ [To be given to the student.]

To whom it may concern:

I hereby appoint..............................of.................................... County, State of Arkansas, as a Beneficiary (or Normal, as the case may be), to the Arkansas Industrial University.

Given under my hand, this...............day of.....................188....

....

Send a notice like the following to the President of the University, and one to the Secretary of the Board of Trustees, at Fayetteville:

[*Form 2.—Notice to President of the University.*]

....Arkansas.
....

To the..........................*University:*

I hereby notify you that I have this day appointed...................................... of...County, State of Arkansas, a Beneficiary (or Normal, as the case may be), to the Arkansas Industrial University.

Given under my hand, this..................day of......................188....

....

BENEFICIARY AND NORMAL APPOINTMENTS.

It is provided in Section 18, of the Act of the General Assembly establishing the University, that the Board of Trustees shall have power to "prescribe the grade and number of scholarships, and prescribe the rules by which pupils who are to be admitted free, shall be elected equally from the various parts of the State." They have, therefore, made provision for 600 Beneficiaries, who will be entitled to four years free tuition, and 400 Normal students, who are also entitled to four years free tuition. These are apportioned among the several counties according to their respective populations by the United States census of 1880, which apportionment is as follows:

COUNTIES	Beneficiaries	Normals	COUNTIES	Beneficiaries	Normals
Arkansas	6	4	Lee	10	6
Ashley	8	5	Lincoln	7	5
Baxter	4	3	Little River	4	2
Benton	15	9	Logan	11	8
Boone	9	6	Lonoke	9	6
Bradley	5	3	Madison	9	6
Calhoun	4	3	Marion	6	4
Carroll	10	6	Miller	7	5
Chicot	7	5	Mississippi	5	4
Clay	5	8	Monroe	7	5
Clark	12	3	Montgomery	4	3
Cleburne	5	3	Nevada	10	7
Cleveland	6	4	Newton	4	2
Columbia	11	8	Ouachita	9	6
Conway	10	6	Perry	2	1
Craighead	5	3	Phillips	16	10
Crawford	11	8	Pike	5	3
Crittenden	7	4	Poinsett	2	1
Cross	4	2	Polk	4	3
Dalias	5	4	Pope	11	8
Desha	7	4	Prairie	6	4
Drew	9	6	Pulaski	25	18
Faulkner	11	6	Randolph	9	6
Franklin	10	8	Saline	7	5
Fulton	5	3	Scott	7	4
Garland	7	4	Searcy	5	4
Grant	5	3	Sebastian	15	12
Greene	5	4	Sevier	5	3
Hempstead	14	10	Sharp	7	5
Hot Spring	6	4	Stone	4	4
Howard	7	5	St. Francis	6	4
Independence	13	8	Union	10	6
Izard	8	6	Van Buren	7	4
Jackson	9	6	Washington	18	12
Jefferson	17	12	White	13	8
Johnson	9	6	Woodruff	7	5
Lafayette	4	2	Yell	11	7
Lawrence	6	4			

There is also one "Honorary Scholarship" to each county, to be selected for superior merit and proficiency from the public schools of each county, according to Section 2, of Act July 23, 1868.

SALE OF ARDENT SPIRITS NEAR THE ARKANSAS INDUSTRIAL UNIVERSITY.

By an Act of the General Assembly of the State of Arkansas, approved March 6, 1875, it is unlawful for any person to sell or give away vinous or ardent spirits within three miles of the Arkansas Industrial University, unless it be prescribed by a regular practicing physician, for medical purposes.

DEGREES CONFERRED.

At the close of the past session, June 11, 1885, the following degrees were conferred by the Board of Trustees upon the members of the Senior Class:

Bachelor of Arts—W. H. Woodall and J. C. Hart.

Bachelor of Latin Letters—E. B. Kinsworthy, C. D. Woolverton and J. W. Howell.

Bachelor of Letters—E. B. Kinsworthy.

The following honorary degrees were conferred at the same and at a subsequent meeting of the Board of Trustees:

Doctor of Divinity—Rev. John H. Dye, Little Rock, Ark., and Rev. James L. Martin, Memphis, Tenn.

Master of Arts—O. F. Russell, Lonoke, Ark., J. F. Howell, Morrilton, Ark., B. P. Baker, Newport, Ark., and W. J. Waggoner, Del Norte, Col.

Applications for catalogues should be addressed to Col. J. L. Cravens, Secretary, Fayetteville, Ark.

BRANCH NORMAL COLLEGE

AT PINE BLUFF.

This Branch of the Normal Department of the Arkansas Industrial University was established by the General Assembly for the purpose of securing an adequate supply of properly trained teachers for the colored public schools of the State. Its terms, course of study, sessions, etc., correspond with those of the Normal Department at Fayetteville, and each county judge is entitled to appoint as many colored beneficiaries to the institution at Pine Bluff as his county is allowed, under the apportionment, to send white ones to Fayetteville; consequently the two classes of appointments do not interfere with each other. The expenses of a student at Pine Bluff, for board and washing, need not exceed $12 per month, and a number of those who have heretofore attended have managed to reduce their expenses very materially by labor.

For further information address the Principal,

PROF. J. C. CORBIN.
Pine Bluff, Ark.

FOURTEENTH CATALOGUE

OF THE

ARKANSAS

INDUSTRIAL UNIVERSITY

LOCATED AT

FAYETTEVILLE, WASHINGTON COUNTY, ARK.

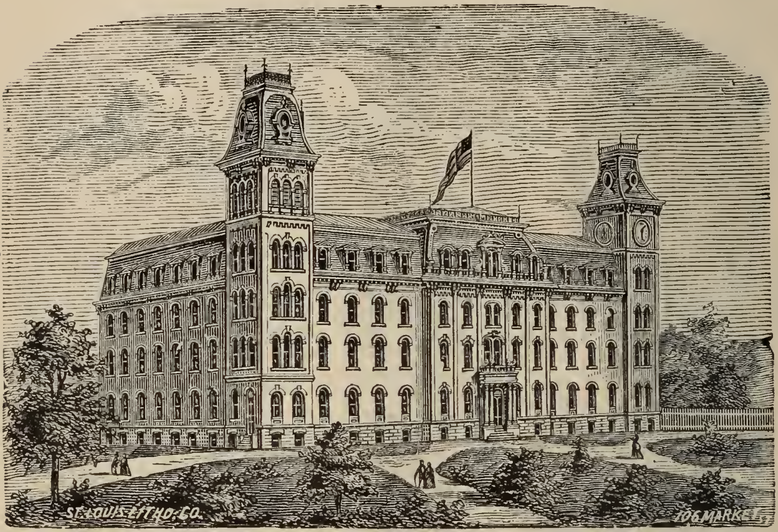
FOR THE YEAR ENDING JUNE 10, 1886

AND

ANNOUNCEMENT FOR 1886-87.

LITTLE ROCK, ARK.
KELLOGG PRINTING COMPANY.
304 MAIN STREET.

Arkansas Industrial University.


ST. LOUIS LITHO. CO.
106 MARKET ST.

Dimensions and Capacity.

It is 214 feet long by 122 feet wide, covering an area of 26,108 square feet. It is five stories high, with French or Mansard roof, covered with slate and tin. The height of the building is 134 feet.

The basement story is built of stone; the foundation is bedded with solid rock. The next three stories are built of brick, and the attic of wood. The basement story is in height 13 feet in the clear; first and second stories 16 feet each; third and fourth, 12 feet; the clock and bell towers extending two stories above the attic.

There are ten rooms 77 by 61 feet, ten rooms 22 by 29 feet, ten rooms 22 by 28 feet, ten rooms 22 by 25 feet, ten rooms 22 by 22 feet, ten rooms 22 by 19 feet, five rooms 15 by 28 feet, four rooms 22 by 20 feet, and one room 74 by 50 feet—making a total of seventy rooms. In addition, there are four corridors 15 by 28 feet and four corridors 14 by 210 feet.

BOARD OF TRUSTEES.

EX-OFFICIO PRESIDENT OF THE BOARD,

His Excellency, SIMON P. HUGHES, Governor, Little Rock, Ark.

REGENT AND SECRETARY,

J. L. CRAVENS, Fayetteville, Ark.

TREASURER,

WM. McILROY, Fayetteville, Ark.

TRUSTEES:

HON. JOSEPH W. MARTIN	Little Rock, Ark.
DR. J. W. BROWN	Camden, Ark
HON. J. P. EAGLE	Lonoke, Ark.
HON. CHARLES COFFIN	Walnut Ridge, Ark.
HON. GEORGE J. CRUMP	Harrison, Ark.
HON. THOMAS M. GUNTER	Fayetteville, Ark.

EX-OFFICIO TRUSTEES:

HON. WOOD E. THOMPSON, SUP'T PUBLIC INSTRUCTION,
Little Rock, Ark.

COL. GEO. M. EDGAR, PRESIDENT OF THE UNIVERSITY,
Fayetteville, Ark.

EXECUTIVE COMMITTEE:

J. W. MARTIN, CHAIRMAN, CHAS. COFFIN, J. P. EAGLE,
W. E. THOMPSON, J. W. BROWN.

FINANCE COMMITTEE:

T. M. GUNTER, CHAIRMAN, G. J. CRUMP, J. W. BROWN.

COMMITTEE ON BY-LAWS:

G. J. CRUMP, CHAIRMAN, CHAS. COFFIN, J. P. EAGLE.

PRINTING COMMITTEE:

GEO. M. EDGAR, CHAIRMAN, CHAS. COFFIN, T. M. GUNTER.

COMMITTEE ON BRANCH NORMAL COLLEGE:

THE GOVERNOR, CHAIRMAN, J. W. BROWN.
W. E. THOMPSON, J. P. EAGLE.

BOARD OF TRUSTEES OF MEDICAL DEPARTMENT:

J. A. DIBRELL, M. D	Little Rock, Ark.
WM. THOMPSON, M. D	Little Rock, Ark.
Wm. M. LAWRENCE, M. D	Batesville, Ark.

BOARD OF VISITORS—1886-87:

HON. A. W. DINSMORE	Bentonville, Ark.
GEN. JAMES C. TAPPAN	Helena, Ark.
HON. H. G. BUNN	Camden, Ark.
GEN. H. B. ARMSTEAD	Charleston, Ark.
HON. JOHN W. STAYTON	Newport, Ark.
HON. J. H. SHINN	Little Rock, Ark.

OFFICERS AND INSTRUCTORS.

GEO. M. EDGAR, LL. D.,
President and Professor of Psychology and Ethics.

R. H. WILLIS, A. M.,
Professor of Ancient Languages and Ancient History.

HOWARD EDWARDS, A. M.,
Professor of English, French, German and Modern History.

E. H. MURFEE, LL. D.,
Professor of Pure Mathematics and Logic.

J. M. WHITHAM, A. M., (Graduate of U. S. Naval Academy),
Professor of Applied Mathematics.

GEO. D. PURINTON, A. M.,
Professor of Chemistry, Mineralogy, Geology and Biology.

J. F. HOWELL, A. M.,
Professor of Normal Department.

* ....
Instructor of Tactics and Commandant of Cadets.

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*To be detailed from the United States Army.

ASSISTANT PROFESSORS.

A. F. LEWIS, A. M.,
Mathematics, English, Book-Keeping and Commercial Law.

GEO. W. MACON, A. B.,
Greek, Mathematics and English.

J. B. GREENE, A. M.,
Latin and English.

Miss E. C. WEIMAR,
English and Latin.

MISS R. W. MOSS,
Elocution, History and English.

MISS KATIE V. KING,
Vocal and Instrumental Music.

MISS LIBBIE HALL,
Drawing and Industrial Art Work for Girls.

STONEWALL TOMPKINS,
Superintendent of Shops.

MEDICAL DEPARTMENT

LITTLE ROCK, ARK.

SESSION OF 1886-7.

PROFESSORS:

P. O. HOOPER, M. D.,
Practice of Medicine.

EDWIN BENTLEY, M. D.,
Institutes and Practice of Surgery.

JAS. A. DIBRELL, Jr., M. D.,
General, Descriptive and Surgical Anatomy, and President of Faculty.

A. L. BREYSACHER, M. D.,
Obstetrics and Diseases of Women and Children.

JOHN J. McALMONT, M. D.,
Materia Medica, Therapeutics, Hygiene and Botany.

JAMES H. SOUTHALL, M. D.,
Institutes of Medicine.

ROSCOE G. JENNINGS, M. D.,
Clinical Surgery and Dermatology.

CUTHBERT P. CONRAD, A. M., University of Virginia,
Medical Chemistry and Toxicology.

L. P. GIBSON, M. D.,
Demonstrator of Anatomy.

T. E. MURRELL, M. D.
Ophthalmology and Otology.

JAMES H. LENOW, M. D.,
Diseases of Genito-Urinary Organs.

CLAIBORNE WATKINS, M. D.,
Physical Diagnosis and Clinical Medicine.

LOUIS R. STARK, M. D.,
Gynæcology.

JOHN WATERS, M. D.,
Clinical Medicine and Prosector of Anatomy.

B. L. GOULDING, U. S. Signal Service,
Meteorology, Etc.

John H. Shed, Janitor, at the College, on Second, between Main and Louisiana Streets.

All communications should be addressed to

R. G. JENNINGS, M. D., Secretary of Faculty, Little Rock, Ark.

CATALOGUE OF STUDENTS.

SESSION 1885-86.

COLLEGIATE DEPARTMENT.

SENIOR CLASS:

Bates, J. H	Cincinnati, Washington County, Ark.
Leverett, Mary	Fayetteville, Washington County, Ark.
Middleton, Mai	Fayetteville, Washington County, Ark.
Mulholland, Sarah	Fayetteville, Washington County, Ark.
Tillar, B. J	Tillar's Station, Drew County, Ark.
Total,	5.

JUNIOR CLASS:

Crump, Mintie H	Harrison, Boone County, Ark.
Dickson, W. E	Magnolia, Columbia County, Ark.
Duffie, B. C	Princeton, Dallas County, Ark.
Gibson, A. V	DeWitt, Arkansas County, Ark.
Hipolite, F. A	Devall's Bluff, Prairie County, Ark.
Humphreys, T. H	Fort Smith, Sebastian County, Ark.
Vaughan, W. R	Little Rock, Pulaski County, Ark.
Wilkinson, H. D	Lavaca, Sebastian County, Ark.
Total,	8.

SOPHOMORE CLASS:

Bowles, Preston	Hancock, Washington County, Md.
Brooks, S. J	Viney Grove, Washington County, Ark.
Crozier, W. N	Fayetteville, Washington County, Ark.
Davies, C. A	Fayetteville, Washington County, Ark.
Danaher, Mike	Little Rock, Pulaski County, Ark.

Drake, N. F.	Cincinnati, Washington County, Ark.
Flynn, W. M.	Fayetteville, Washington County, Ark.
Hall, H. J.	Fayetteville, Washington County, Ark.
Harris, Ada	Fayetteville, Washington County, Ark.
Hobbs, J. H.	Bentonville, Benton County, Ark.
Miller, Wm.	Plantersville, Drew County, Ark.
Obenshain, Ora	Fayetteville, Washington County, Ark.
Ostrander, Effie	Fayetteville, Washington County, Ark.
Pace, Ida	Fayetteville, Washington County, Ark.
Polson, Alice	Southwest City, McDonald County, Mo.
Powell, W. W.	Melbourne, Izard County, Ark.
Reed, J. L.	Fayetteville, Washington County, Ark.
Stone, A. B.	Fayetteville, Washington County, Ark.
Taff, J. H.	Waldron, Scott County, Ark.
Treadwell, Lee	Toledo, Cleveland County. Ark.
Warren, G. A.	Hazel Grove, Independence Co., Ark.
Williams. H. E.	Fayetteville, Washington County, Ark.
Total	22.

FRESHMAN CLASS.

Aiken, Don	Fayetteville, Washington County, Ark.
Botefuhr, Beulah	Fayetteville, Washington County, Ark.
Coffey, Belle	Fayetteville, Washington County, Ark.
Downes, S. A.	Nashville, Howard County, Ark.
Duffie, Sidney	Princeton, Dallas County, Ark.
Edgar, G. D.	Fayetteville, Washington County, Ark.
Ellis, Kate	Fayetteville, Washington County, Ark.
Fishback, L. F.	Fort Smith, Sebastian County, Ark.
Fuqua, Birdie	Fayetteville, Washington County, Ark.
Ganaway, J. R.	Warren, Bradley County, Ark.
Harrison, Grace	Washington, D. C.
Humphreys, G. A.	Fort Smith, Sebastian County, Ark.
Kemp, Elzie	Fayetteville, Washington County, Ark.
McIlroy, J. H.	Fayetteville, Washington County, Ark.
McNeely, J. C.	Little Rock, Pulaski County, Ark.
McRoy, Minnie	Fayetteville, Washington County, Ark.

Reed, J. L	Fayetteville, Washington County, Ark.
Reed, W. L.	Fayetteville, Washington County, Ark.
Rutherford, Julia	Billingsly, Washington County, Ark.
Skelton, G. V.	Fayetteville, Washington County, Ark
Slagle, Ida	Siloam, Benton County, Ark.
Southerland, J. W	Hindsville, Madison County, Ark.
Taff, A. G	Waldron, Scott County, Ark.
Taff, J A	Waldron, Scott County, Ark.
Taff, Mollie	Waldron, Scott County, Ark.
Thornton, T. J	Hampton, Calhoun County, Ark.
Tillman, Annie	Fayetteville, Washington County, Ark.
Trott, Bertha	Fayetteville, Washington County, Ark.
Valentine, J. T	Webb City, Franklin County, Ark.
Wade, J. M.	Blanshard's Springs, Union County, La.
Whitford, W. E.	Silver Hill, Sevier County, Ark.
Wainwright, Fannie	Fayetteville, Washington County, Ark.
Wheeler, J. N	Warren, Bradley County, Ark.
Total	33.

PREPARATORY DEPARTMENT.

SUB-FRESHMAN CLASS.

Albright, G. E	Fayetteville, Washington County, Ark.
Ammons, Molsie	El Dorado, Union County, Ark.
Anderson, W. L	Fayetteville, Washington County, Ark.
Baum, Nettie	Fayettevllle, Washington County, Ark.
Beard, Elisha	Oil Trough, Independence County, Ark.
Blanks. W. L	Hamburg, Ashley County, Ark.
Brown, A. S	Charleston, Franklin County, Ark.
Brown, John	Belmont, Crawford County, Ark.
Brown, J. R	Gurdon, Clark County, Ark.
Bruce, T. V	Fort Smith, Sebastian County, Ark.
Campbell, Pearl	Fayetteville, Washington County, Ark.
Corley, E. P	Fayetteville, Washington County, Ark.
Dean, Mark	Morrilton, Conway County, Ark.
Dibrell, M. S	Van Buren, Crawford County, Ark.
Dowdle, T. A	Morrilton, Conway County, Ark.
Dowell, Delia	Fayetteville, Washington County, Ark.
Dowell, S. F	Fayetteville, Washington County, Ark.
Dunaway, Maggie	Fayetteville, Washington County, Ark.
Dunaway, W. C	Good Hope, Faulkner County, Ark.
Edgar, Bessie	Fayetteville, Washington County, Ark.
Ellis, Jessie	Fayetteville, Washington County, Ark.
Gaines, J. H	Greenwood, Sebastian County, Ark.
Green, A. T	Morrilton, Conway County, Ark.
Gregg, Dora,	Fayetteville, Washington County, Ark.
Gregg, H. L	Fayetteville, Washington County, Ark.
Gunter, W. T	Fayetteville, Washington County, Ark.
Hames, W. S	Pineville, Izard County, Ark.
Harris, R. D	Melbourne, Izard County, Ark.
Hervey, W. R	Morrilton, Conway County, Ark.

Huckleberry, J. H	Van Buren, Crawford County, Ark.
Irvin, R. W	Fayetteville, Washington County, Ark.
Johnson, W. H	Clarendon, Monroe County, Ark.
Kingston, C. D	Granby, Newton County, Mo.
Lane, A. C	Dallas, Polk County, Ark.
Magness, J. W	Fayetteville, Washington County, Ark.
Messenger, E. F	Prattsville, Grant County, Ark.
Michaels, J. F	Fayetteville, Washington County, Ark.
Miller, E. S	Fort Smith, Sebastian County, Ark.
Millsaps, N	Fayetteville, Washington County, Ark.
Morrow, Mattie	Fayetteville, Washington County, Ark.
Mosley, B. J	Eureka Springs, Carroll County, Ark.
North, Nattie	Maguire's Store, Washington Co , Ark.
Northrop, A. E	Pass Christian, Harrison County, Miss.
Obenshain, Ula	Eureka Springs, Carroll County, Ark.
Pace, Frank	Fayetteville, Washington County, Ark.
Park, P. J	Cabot, Lonoke County, Ark.
Pittman, H. N	Fayetteville, Washington County, Ark.
Pittman, Jennie	Fayetteville, Washington County, Ark.
Reynolds, Mattie	Fayetteville, Washington County, Ark.
Robertson, F. O	Monticello, Drew County, Ark.
Routh, Louella	Boonsboro, Washington County, Ark.
Rutherford, R. L	Billingsly, Washington County, Ark.
Shreve, A. W	Farmington, Washington County, Ark.
Shreve, H. B	Farmington, Washington County, Ark.
Sloan, J. H	Powhatan, Lawrence County, Ark.
Taylor, Maggie	Fayetteville, Washington County, Ark.
Turner, F. P	Newport, Jackson County, Ark.
Turner, G. W	Ossawotamie, Kansas.
Vaughan, Cordie	Fayetteville, Washington County, Ark.
Volentine, Alice	Webb City, Franklin County, Ark.
Walker, Nannie	Fayetteville, Washington County, Ark.
Waters, G. A	Dayton, Sebastian County, Ark.
Webb, Abner	New Edinburg, Cleveland County, Ark.
White, E. J	Bentonville, Benton County, Ark.
Whitmore, J. T	Center Point, Howard County, Ark.

Williams, O. H	Fayetteville, Washington County, Ark.
Wines, Lula	Fayetteville, Washington County, Ark.
Wood, R. E	Wallaceburg, Hempstead County, Ark.
Young, C. I	Fayetteville, Washington County, Ark.
Total	69

A CLASS.

Baldridge, G. W	Fayetteville, Washington County, Ark.
Barner, J. W	Turner, Phillips County, Ark.
Bond, Board	Newport, Jackson County, Ark.
Botefuhr, Fannie	Fayetteville, Washington County, Ark.
Bray, W. O	Fayetteville, Washington County, Ark.
Bush, C. F	Van Buren, Crawford County, Ark.
Butler, D. C	Malvern, Hot Springs County, Ark.
Campbell, R. O	Fayetteville, Washington County, Ark.
Clinkscales, N. A	Van Buren, Crawford County, Ark.
Collins, Lillie	Fayetteville, Washington County, Ark.
Conley, J. F	Waldron, Scott County. Ark.
Curry, Jennie	Fayetteville, Washington County, Ark.
Curry, Lula	Fayetteville, Washington County, Ark.
Curry, May	Fayetteville, Washington County, Ark.
Davidson, Lenna	Fayetteville, Washington County, Ark.
Davies, Elza	Fayetteville, Washington County, Ark.
Davis, Zeno W	Fort Smith, Sebastian County, Ark.
Doak, J. A	Boonsboro', Washington County, Ark.
Duke, Annie	Fayetteville, Washington County, Ark.
Eoff, L. F	Bellefonte, Boone County, Ark.
Fuqua, Jessie	Fayetteville, Washington County, Ark.
Greene, Fred W	Fayetteville, Washington County, Ark.
Hamiter, J. H	Walnut Hills, Lafayette County, Ark.
Hamor, Capitola	Winnsboro', Texas.
Hansard, C. O	Fayetteville, Washington County, Ark.
Harris, J. F	Hot Springs, Garland County, Ark.
Harrison, Lydia	Fayetteville, Washington County, Ark.
Healy, Dan	Fayetteville, Washington County, Ark.
Horton, S. A	Fair View, Dallas County, Ark.

Hudson, E. M	Dahoma, Franklin County, Ark.
Hurlbut, Maude	Fayetteville, Washington County, Ark.
Jackson, Edna	Fayetteville, Washington County, Ark.
Jennings, Lizzie	Fayetteville, Washington County, Ark.
Jobe, Fannie	Fayetteville, Washington County, Ark.
Jones, Bertie	Fayetteville, Washington County, Ark.
Lacotts, J. A	DeWitt, Arkansas County, Ark.
Lee, Frank	Fayetteville, Washington County, Ark.
Lee, Lillie	Fayetteville, Washington County, Ark.
Lewis, Joe	Boonsboro', Washington County, Ark.
Logan, Ed	Walnut Hills, Lafayette County, Ark.
Mayes, Ida	Fayetteville, Washington County, Ark.
McGough, T. J	Dilolo, Union County, Ark.
McIlroy, C. D	Fayetteville, Washington County, Ark.
Mitchell, J. F	Coffee Creek, Phillips County, Ark.
Morrow, S. Y	Fayetteville, Washington County, Ark.
Nash, W. A	Jonesboro', Craighead County, Ark.
Nix, Minnie	Fayetteville, Washington County, Ark.
Oliver, Wallace	Lee's Creek, Crawford County, Ark.
Pace, Henry	Fayetteville, Washington County, Ark.
Parker, E. L	DeWitt, Arkansas County, Ark.
Pollard, Mary	Fayetteville, Washington County, Ark.
Pounds, W. M	Jonesboro', Craighead County, Ark.
Price, W. M	Little Rock, Pulaski County, Ark.
Quinney, W. R	Lanark, Bradley County, Ark.
Reed, F. W	Reed's, Jasper County, Mo.
Reed, Maude,	Fayetteville, Washington County, Ark.
Reynolds, Farie	Fayetteville, Washington County, Ark.
Savage, W. J	Eureka Springs, Carroll County, Ark.
Saxon, E. F	Lisbon, Union County, Ark.
Schoolfield, R. E	Fayetteville, Washington County, Ark.
Shaw, G. G	Conway, Faulkner County, Ark.
Smith, S. K	Fayetteville, Washington County, Ark.
Switzer, D. M	Petersburg, Ashley County, Ark.
Thomas, Lizzie	Fayetteville, Washington County, Ark.

Thompson, Floyd	Hope, Hempstead County, Ark.
Treadwell, Evans	Toledo, Cleveland County, Ark.
Turner, J. L.	Cypert, Phillips County, Ark.
VanWinkle, Peter	Fayetteville, Washington County, Ark.
Vaughan, J. C.	Fayetteville, Washington County, Ark.
Vaughan, R. E.	Fayetteville, Washington County, Ark.
Volentine, J. B.	Webb City, Franklin County, Ark.
Walker, Lou	Fayetteville, Washington County, Ark.
Ward, W. J.	Charlotte, Independence County, Ark.
Watson, Fannie	Boonsboro, Washington County, Ark.
*West, R. E. L.	Clarendon, Monroe County, Ark.
Whitten, J. D.	Bellefonte, Boone County, Ark.
Wigley, Mittie	Mulberry, Franklin County, Ark.
Zellner, J. N.	Viney Grove, Washington County Ark.
Total	78

*Died September 30, 1885.

B CLASS.

Aiken, Gertie	Fayetteville, Washington County, Ark.
Ashley, W. H.	Little Rock, Pulaski County, Ark.
Baldridge, J. R.	Fayetteville, Washington County, Ark.
Breeden, G. O.	Morrilton, Conway County, Ark,
Brickell, J. B.	Popular Grove, Phillips County, Ark.
Burns, Alice	El Dorado, Union County, Ark.
Byrnes, Dora	Fayetteville, Washington County, Ark.
Carter, G. W.	Carter's Store, Washington County, Ark.
Carter, Lizzie	Fayetteville, Washington County, Ark.
Crawford, Della	Fayetteville, Washington County, Ark.
Cummings, Lula	Prairie Grove, Madison County, Ark.
Dale, Nina	Fayetteville, Washington County, Ark.
Deaderick, J. D.	Vaundale, Cross County, Ark.
Dowdle, Katie	Morrilton, Conway County, Ark.
Ferguson, A. L.	Fayetteville, Washington County, Ark.
Ferguson, George	Fayetteville, Washington County. Ark.
Fisher, N. F.	Greenwood, Sebastian County, Ark.
George, K. L.	Reed's Landing, Pulaski County, Ark.

Green, T. C	Barton, Phillips County, Ark.
Gregg, Ida	Fayetteville, Washington County, Ark.
Harrison, W. H	Sulphur Rock, Independence Co., Ark.
Hight, Beulah	Whitener, Madison County, Ark.
Hollis, Russell	Orlando, Cleveland County, Ark.
Horton, Maude	Fair View, Dallas County, Ark.
Hunt, Gertie	Fayetteville, Washington County, Ark.
Irvin, R. B	Fayetteville, Washington County, Ark.
Jackson, A. L	Altus, Franklin County, Ark.
Johnson, G. W	Fayetteville, Washington County, Ark.
Lewis, L. L	Fayetteville, Washington County, Ark.
Lowry, Sam	Helena, Phillips County, Ark.
Martin, E. W	Fort Smith, Sebastian County, Ark.
McCrary, R. D	Mineral Springs, Howard County, Ark.
McIlroy, Annie	Fayetteville, Washington County, Ark.
NcNeely, T. H	Rackensack, Pulaski County, Ark.
Meyer, J. R	Pine Bluff, Jefferson County, Ark.
Middleton, Maude	Fayetteville, Washington County, Ark.
Mills, B. L	El Paso, White County, Ark.
Nunn, J. B	Camden, Ouachita County, Ark.
O'Connell, Maggie	Fayetteville, Washington County, Ark.
Probst, C. J	Little Rock, Pulaski County, Ark.
Shaver, S. L	Grange, Sharp County, Ark.
Smith, Leon	Fayetteville, Washington County, Ark.
Smith, W. L	Fayetteville, Washington County, Ark.
Stuart, R. B	Columbus, Hempstead County, Ark.
Switzer, Nettie M	Petersburg, Ashley County, Ark.
Taff, S. M	Fayetteville, Washington County, Ark.
Velvin, R. W	Hope, Hempstead County, Ark.
Washmood, W. B	Little Rock, Pulaski County, Ark.
Watson, J. E	Ozark, Franklin County, Ark.
Wells, T. R	Morrilton, Conway County, Ark.
Wilson, Lizzie	Fayetteville, Washington County, Ark.
Total	51.

C CLASS.

Archias, L. H	Fayetteville, Washington County, Ark.
Brown, A. W	Little Rock, Pulaski County, Ark.
Buckner, Jennie	Fayetteville, Washington County, Ark.
Butt, Ellie	Fayetteville, Washington County, Ark.
Childs, R. M	Lannark, Bradley County. Ark.
Collins, S. S	Van Buren, Crawford County, Ark.
Deaderick, I. N	Vaundale, Cross County, Ark.
Dodds, J. B., Jr	Pine Bluff, Jefferson County, Ark.
Edgar, Geo. T	Fayetteville, Washington County, Ark.
Everett, J. W	Norwoodville, Sevier County, Ark.
Ferguson, J. W	Fayetteville, Washington County, Ark.
Faulkner, C. E	Helena, Phillips County, Ark.
Greer, Luther	Searcy, White County, Ark.
Halk, J. W	Cherry Valley, Cross County, Ark.
Harris, R. C	Fayetteville, Washington County, Ark.
Howell, Willey	Fayetteville, Washington County, Ark.
Howerton, C. T	Fayetteville, Washiugton County, Ark.
Hulse, M. L	Fayetteville, Washington County, Ark.
Hurlbut, J. S	Fayetteville, Washington County, Ark.
Jackman, J. S	New Gascony, Jefferson County, Ark.
Jackson, Hugh	Fayetteville, Washington County, Ark.
Jelks, J. L	Riverside, Woodruff County, Ark.
Johnson, Lydia K	Fayetteville, Washington County, Ark.
Kellogg, W. S	Little Rock, Pulaski County, Ark.
Killough, Wesley	Vaundale, Cross County, Ark.
Langford, A. E. B	Champagnolle, Union County, Ark.
Lee, C. E	Fayetteville, Washington County, Ark.
Long, Annie	Wesley, Madison County, Ark.
McKinney, W. M	Akron, Independence County, Ark.
McNair, W. D	Fayetteville, Washington County, Ark.
Murrell, Walter	Austin, Lonoke County, Ark.
Northrop, J. D	Pass Christian, Harrison County, Miss.
Pounds, W. A	Jonesboro', Craighead County, Ark.
Randolph, Berry	Hot Springs, Garland County, Ark.

Sevier, A. H	Walnut Hills, Lafayette County, Ark.
Shreve, H. W	Farmington, Washington County, Ark.
Simmons, Ella	Fayetteville, Washington, County, Ark.
Smith, R. L	Russellville, Pope County, Ark.
Sosbee, J. M	Santos, Pope County, Ark.
Talley, J. C	Calico Rock, Izard County, Ark.
Wade, Eddie B	Fayetteville, Washington County, Ark.
Wade, M. C	Fayetteville, Washington County, Ark.
Ward, W. J	Fayetteville, Washington County, Ark
Warren, J. T	El Paso, White County, Ark.
Webster, Katie	Little Rock, Pulaski County, Ark.
White, Lula	Fayetteville, Washington County, Ark.
Yarbro', W. P	Riverside, Woodruff County, Ark.
Total	47.

MUSIC CLASS.

Boles, Mary	Fayetteville, Washington County, Ark.
Buckner, Jennie	Fayetteville, Washington County, Ark.
Carter, Nora	Fayetteville, Washington County, Ark.
Carter, Lizzie	Fayetteville, Washington County, Ark.
Collins, Lillie	Little Rock, Pulaski County, Ark.
Dale, Nina	Fayetteville, Washington County, Ark.
Davidson, Lenna	Fayetteville, Washington County, Ark.
Dowell, Delia	Fayetteville, Washington County, Ark.
Dowdle, Kate	Morrilton, Conway County, Ark.
Duffie, Sidney	Princeton, Dallas County, Ark.
Edgar, Gertrude	Fayetteville, Washington County, Ark.
Fuqua, Birdie	Fayetteville, Washington County, Ark.
Gregg, Ida	Fayetteville, Washington County, Ark.
Gunter, Gertrude	Fayetteville, Washington County, Ark.
Harrison, Lizzie	Fayetteville, Washington County, Ark.
Harris, Mary	Bentonville, Benton County, Ark.
Harris, John	Hot Springs, Garland County, Ark.
Healy, Mary	Fayetteville, Washington County, Ark
Horten, Maud	Fairview Dallas County, Ark.
Jennings, Lily	Fayetteville, Washington County, Ark.

Jennings, Lizzie	Fayetteville, Washington County, Ark.
Johnson, Lydia	Fayetteville, Washington County, Ark.
Knight, Carrie	Fayetteville, Washington County, Ark.
Loy, Minnie	Fayetteville, Washington County, Ark.
Macon, G. W	Talladega, Alabama.
Maguire, Addie	Maguire's Store, Washington Co., Ark.
Phelps, Mamie	Fayetteville, Washington County, Ark.
Pitman, Mary	Fayetteville, Washington County, Ark.
Polson, Alice	Southwest City, McDonald County, Mo.
Reed, Maud	Fayetteville, Washington County, Ark.
Sanders, Zena	Huntsville, Madison County, Ark.
Slagle, Ida	Hico, Benton County, Ark.
Stone, Amanda	Fayetteville, Washington County, Ark.
Thurmond, Mamie	Fayetteville, Washington County, Ark.
Trott, Robbie	Fayetteville, Washington County, Ark.
VanWinkle, Peter	Fayetteuille, Washington County, Ark.
Walker, Mannie	Fayetteville, Washington County, Ark.
Walker, Lou	Fayetteville, Washington County, Ark.
Webster, Kate	Little Rock, Pulaski County, Ark.
Whitlow, Mabel	Pilot Grove, Cooper County, Mo.
Watterman, Jessie	Fayetteville, Washington County, Ark.
Williams, Mattie	Fayetteville, Washington County, Ark.
Wilson, Belle	Fayetteville. Washington County, Ark.
Total	43.

ART CLASS.

Baum, Leila	Fayetteville, Washington County, Ark.
Davies, Audie	Fayetteville, Washington County, Ark.
Putnam, Annie	Fayetteville, Washington County, Ark.
Reed, Lina	Fayetteville, Washington County, Ark.
Walker, Nannie	Fayetteville, Washington County, Ark.
Total	5.

GENERAL SUMMARY.

LITERARY, SCIENTIFIC AND ART SCHOOLS, FAYETTEVILLE.

Collegiate Department	68
Preparatory Department	245
Failed to Pass Entrance Examination	15
Music Class	43
Art Class	5
Total	376
Names Repeated in Music and Art	22
Net Total	354
Medical Department, Little Rock	53
Branch Normal	203
Grand Total	610

COURSES OF STUDY.

COLLEGIATE DEPARTMENT.

The following are the College courses:

1. Agricultural Course, leading to the distinction of Graduate in Agriculture.
2. Normal Course, leading to the distinction of Graduate in the Normal Department.
3. Mechanical Engineering, (Mech. E.)
4. Civil Egineering Course, (C. E.)
5. General Science Course, (B. S.)
6. Bachelor of Letters Course, (B. Let.)
7. Language Course, (B. A.)

HIGH SCHOOL DEPARTMENT.

This department, which is between the Grammar School and the College, embraces the following courses:

1. Language Course.
2. Short Normal Course.
3. Business Course.

GRAMMAR SCHOOL.

This school, made necessary by the imperfect preparatory training in many of the Counties of the State, embraces two classes, instruction in which is confined to the Common School branches. It is hoped that the Public School system may soon become so efficient as to enable the University to dispense with classes of this grade.

AGRICULTURAL COURSE.

A figure after any subject indicates the number of recitations per week.

YEARS.	Hours of Recit'ns	FIRST TERM.	SECOND TERM.	THIRD TERM.
FIRST.		Eng. Gram & Comp'n	Eng. Grammar & Comp'n	Eng. Grammar & Comp'n
		Arithmetic	Arithmetic	Arithmetic.
		U. S. History.	U. S. History	U. S. History
		Reading and Spelling.	Reading and Spelling	Reading and Spelling
		Physical Geography	Elementary Physics	Elementary Physics
		Practical Agriculture or Drawing and Shop Work	Practical Agriculture or Drawing and Shop Work	Practical Agriculture or Drawing and Shop Work.
SECOND.		Eng Analysis & Comp'n	Eng. Analysis & Comp'n	Eng. Analysis and Comp'n.
		Algebra.	Algebra and Geometry	Geometry
		Practical Agriculture	Practical Agriculture	Practical Agriculture
		El Chemistry (3) Elocution (2)	El Physiology (3 Elocution (2)	El Botany (3). Elocution (2)
		Practical Agriculture or Drawing and Shop Work	Practical Agriculture or Drawing and Shop Work	Practical Agriculture or Drawing and Shop Work.
THIRD	1st.	Algebra	Algebra and Geometry	Geometry
	2d.	Physiology	Zoology	Botany
	3d.	English.	English	English
	4th.	General Chemistry	General Chemistry	Gen. Chem. and Laboratory
	5th.			
	6th.	Practical Agriculture or Shop Work and Drawing	Practical Agriculture or Shop Work and Drawing	Practical Agriculture or Shop Work and Drawing
FOURTH.	1st.	Analyt. Chemistry (Qual.)	Analyt. Chemistry (Qual.)	Agricultural Chemistry
	2d.	Struct. & Microscop. Bot'y	Science of Agriculture	
	3d	Geometry	Plane Trigonometry.	Trigonometry & Surveying
	4th.			Ethics (3). Polit. Econ. (2).
	5th.	Geology	Lectures on Entomology (3). Veterinary Science (2)	Practical Agriculture
	6th.	Engineering and Architecture(3) Shop Work(2)	Engineering and Architecture (3) Shop Work (2)	Practical Agriculture (2). Engineering & Arch. (3)

A post-graduate course of two years, embracing a more extended course in Chemistry, Agricultural Science, Geology, Mineralogy, Mathematics, German, Ethics, Sociology and Evidences of Christianity, with Astronomy and Constitutional Law, will entitle the student to the degree of Bachelor of Science.

NORMAL COURSE.

YEARS.	Hours of Recit'n.	FIRST TERM.	SECOND TERM.	THIRD TERM.
FIRST.		Eng. Gram. & Composition.	Eng. Gram. & Composition.	Eng. Gram. & Composition.
		Arithmetic	Arithmetic	Arithmetic
		U. S. History	U. S. History	U. S. History
		Reading and Spelling Methods of Teaching	Reading and Spelling Methods of Teaching	Reading and Spelling Methods of Teaching
		Latin Gildersleeve's Gram. Jones's 1st Lessons	Latin Gram. & Lessons	Latin Gram. & Lessons
		Drawing and Shop Work	Drawing and Shop Work	Drawing and Shop Work
SECOND.		Eng. Analysis and Comp'n.	Eng. Analysis & Comp'n	Eng. Analysis & Comp'n
		Algebra	Algebra and Geometry	Geometry
		Latin. Grammar, Compositon and Reader	Latin (Cæsar or Curtius).	Latin (Cæsar or Curtius)
		Pedagogy	Pedagogy	Pedagogy
		Drawing and Shop Work	Drawing and Shop Work	Drawing and Shop Work
THIRD.	1st.	Algebra	Algebra and Geometry	Geometry
	2d.		Zoology (2)	Botany (2)
	3d.	English	English	English
	4th.	Physics.	Methods of Teaching (3)	Theo. & Pract. Teaching (3)
	5th.	Latin (Cæsar or Nepos)	Latin (Vergil) & Rom. Hist.	Latin (Vergil & Rom. Hist.
	6th.	Shop Work and Drawing	Shop Work and Drawing	Shop Work and Drawing.
FOURTH.	1st.	History of Education (3) English (2).	Philos. of Education (3) English (2)	Constitution U. S. & Ark. (3). English (2)
	2d.	Latin (Cicero's Orations)	Latin (Odes of Horace)	Latin (Livy)
	3d.	Geometry	Plane Trigonometry	Trigonometry & Surveying.
	4th.	General Chemistry	General Chemistry	Ethics & Political Economy.
	5th.			
	6th.	Drawing and Shop Work	Drawing and Shop Work	Psychology (3) School Law (2)

A post-graduate course of two years, embracing Mineralogy, Geology, Latin, Anglo-Saxon, Analytical Geometry, English, Astronomy, Psychology, Ethics, Sociology, Evidences of Christianity, Political Science and Logic, will entitle the student to the degree of Bachelor of Letters.

COURSE OF MECHANICAL ENGINEERING.

CLASSES.	Hours of Recit'n.	FIRST TERM.	SECOND TERM.	THIRD TERM.
FRESHMAN.	1st.	Algebra	Algebra and Geometry	Geometry
	2d.	Mechanical Drawing, Work Shop Appliances.	Zoology	Botany
	3d.	English	English	English
	4th.	Physics	Physical Laboratory Work	Elementary Mechanics
	5th.			
	6th.	Shop Work and Drawing	Shop Work and Drawing	Shop Work and Drawing
SOPHOMORE.	1st.	Mechanical Drawing	Mechanical Drawing	Mechanical Drawing
	2d.	Elements of Mechanism(3)	Elements of Mechanism (3).	Elements of Mechanism (3).
	3d.	Geometry	Plane Trigonometry	Trigonometry & Surveying
	4th.	General Chemistry	General Chemistry	Gen. Chem. and Laboratory
	5th.	Electricity	Heat	Physical Laboratory Work.
	6th.	Shop Work (2)	Shop Work (2)	Shop Work (2)
JUNIOR.	1st.	Analyt.Chemistry (Qual)	Analyt. Chem. (Qual.) (4)	
	2d.	Analytical Geometry	Analyt. Geom. and Calculus	Calculus
	3d.		El. Applied Mechanics (3)	Elem. Applied Mechanics.
	4th.	Machinery and Mill Work	Machinery and Mill Work	Machinery and Mill Work
	5th.	Steam Engine and Boilers.	Steam Engine and Boilers(3)	Mineralogy
	6th.	Drawing	Drawing	Drawing
SENIOR.	1st.	Rankine's Steam Engine	Rankine's Steam Engine	Rankine's Steam Engine
	2d	Lectures on Designing		
	3d.	Astronomy	Astronomy	Lectures on Designing (3). Mech.& Hydr.Engin'rg(2)
	4th.	Applied Mechanics	Applied Mechanics	Applied Mechanics
	5th.		Ind. Chemistry (half term) Ethics (half term)	Ethics and Ev. Christianity
	6th.	Drawing	Drawing	Thesis

COURSE OF CIVIL ENGINEERING.

CLASSES.	Hours of Recita'n	FIRST TERM.	SECOND TERM.	THIRD TERM.
FRESHMAN.	1st.	Algebra	Algebra and Geometry	Geometry
	2d.	Mechanical Drawing	Zoology	Botany
	3d.	English	English	English
	4th.	Physics	Physical Laboratory Work	Elementary Mechanics
	5th.			
	6th	Shop Work and Drawing	Shop Work and Drawing	Shop Work and Drawing
SOPHOMORE.	1st	Mechanical Drawing	Mechanical Drawing	Mechanical Drawing
	2d.			
	3d.	Geometry	Plane Trigonometry	Trigonometry & Surveying.
	4th	General Chemistry.	General Chemistry	Gen. Chem. & Laboratory.
	5th.	Electricity	Heat	Physical Laboratory Work
	6th	Surveying (3) Shop Work (2)	Surveying (3) Shop Work (2)	Topog'y (3) Shop Work (2)
JUNIOR.	1st.	Analyt. Chemistry (Qual)	Higher Surveying	
	2d.	Analytical Geometry	Analyt. Geom. & Calculus.	Calculus
	3d.	Field Engineering (R. Rds.)	Field Engineering (2) El. Appl'd Mechanics (3)	Elem. Applied Mechanics
	4th.			Advanced Topography
	5th.	Geology.	Geology	Mineralogy
	6th.	Drawing	Drawing	Drawing
SENIOR.	1st.	Civil Engineering	Civil Engineering	Civil Engineering
	2d.	Lectures on Designing		
	3d.	Astronomy	Astronomy	Lectures on Designing (3) Mech. & Hydr. Engin'rg (2).
	4th.	Applied Mechanics	Applied Mechanics	Applied Mechanics.
	5th		Ind. Chemistry (½ term) Ethics (half term)	Ethics & Ev. Christianity
	6th	Drawing	Drawing	Thesis

GENERAL SCIENCE COURSE FOR BACHELOR OF SCIENCE.

CLASSES.	Hours of Recitat'n.	FIRST TERM.	SECOND TERM.	THIRD TERM.
FRESHMAN.	1st.	Algebra	Algebra and Geometry	Geometry
	2d.	Physiology	Zoology	Botany
	3d.	English	English	English
	4th.	Physics	Physical Laboratory Work	Elementary Mechanics
	5th.			
	6th.	Shop Work and Drawing	Shop Work and Drawing	Shop Work and Drawing
SOPHOMORE.	1st.		English Hist. and Lit.	English Hist. and Lit
	2d.	Struct. & Microscop. Botany		
	3d.	Geometry	Plane Trigonometry	Trigonometry & Surveying
	4th.	General Chemistry	General Chemistry	Gen. Chem. & Laboratory
	5th.	Electricity	Heat	Physical Laboratory Work
	6th.	Drawing and Shop Work	Drawing and Shop Work	Drawing and Shop Work
JUNIOR.	1st.	Analyt. Chemistry (Qual.)	Analyt. Chemistry (Qual)	Analyt. Chemistry (Quant)
	2d.	Analytical Geometry	Analyt. Geom. and Calculus	Calculus
	3d.	German	German	German
	4th.			
	5th.	Geology	Geology	Mineralogy
	6th.	Drawing		
SENIOR.	1st.			
	2d.	German	German	German
	3d.	Astronomy	Astronomy	Constitutional Law
	4th.		Political Economy	
	5th.	Assaying and Mining	Ind. Chemistry (half term) Ethics (half term)	Ethics and Ev. Christianity
	6th.	Analyt. Chemistry (Quant.)		An. Chem. (Soils & Plants).

COURSE FOR BACHELOR OF LETTERS.

CLASSES.	Hours of Recita'n.	FIRST TERM.	SECOND TERM.	THIRD TERM.
FRESHMAN.	1st.	Algebra	Algebra and Geometry	Geometry
	2d.	Physiology	Zoology	Botany
	3d.	English	English	English
	4th.			
	5th.	Latin or French.	Latin & R. Hist. or French.	Latin & Rom. Hist. or F'ch.
	6th.	Shop Work and Drawing	Shop Work and Drawing	Shop Work and Drawing
SOPHOMORE.	1st.	English	English	English
	2d.	Latin or French	Latin or French	Latin or French
	3d.	Geometry	Plane Trigonometry	Trigonometry & Surveying.
	4th.			
	5th.	Geology	Geology	Mineralogy
	6th.	Drawing and Shop Work	Drawing and Shop Work	Drawing and Shop Work
JUNIOR.	1st.			
	2d.	Analytical Geometry	Analyt. Geom. & Physics	Physics and Astronomy
	3d.	Fine Arts	Fine Arts	Fine Arts
	4th.	General Chemistry [4]	General Chemistry [4]	Logic [4]
	5th.	English [3].	English [3]	English [3]
	6th.	Latin or German.	Latin or German	Latin or German
SENIOR.	1st.	Latin or German	Latin & Rom. Lit. or Ger.	Latin or German
	2d.	Fine Arts	Fine Arts	Fine Arts
	3d.			Constitutional Law
	4th.		Political Economy [4]	
	5th.	Psychology	Psychology and Ethics	Ethics & Ev. Christianity.
	6th.	Anglo-Saxon	Anglo-Saxon [3]	Anglo-Saxon and Gothic

Grammar and prose composition are taught throughout the course in each language.

LANGUAGE COURSE FOR BACHELOR OF ARTS.

CLASSES.	Hours of Recit'n.	FIRST TERM.	SECOND TERM.	THIRD TERM.
FRESHMAN.	1st.	Algebra	Algebra and Geometry	Geometry
	2d.			
	3d.	English	English	English
	4th.	Greek(Xenophon)orFrench	Greek(Xenophon)or French	Greek (Lysias) or French
	5th.	Latin (Cæsar or Nepos)	Latin (Vergil) & Rom. Hist.	Latin(Vergil)and Rom.Hist.
	6th.	Shop Work and Drawing	Shop Work and Drawing	Shop Work and Drawing
SOPHOMORE.	1st.	English	English	English
	2d.	Latin (Cicero's Orations)	Latin (Odes of Horace)	Latin (Livy)
	3d	Geomety	Plane Trigonomesry	Trigonometry & Surveying
	4th.	Greek (Herodotus) or Fr'ch	Greek (Homer) and Greek History or French	Greek (Homer) and Greek History or French
	5th.			
	6th.	Drawing and Shop Work	Drawing and Shop Work	Drawing and Shop Work
JUNIOR.	1st.			
	2d.	Analytical Geometry	Analyt. Geom. and Physics	Physics and Astronomy
	3d.	Greek (Demosthenes)or Ger	Greek(Euripides)or German	Greek (Thucydides) or Ger.
	4th.	General Chemistry (4)	General Chemistry (4)	Logic (4)
	5th.	English (3)	English (3)	English (3)
	6th.	Latin (Livy), (3)	Lat.(Sat. & Epist. of Horace) (3)	Latin (Tacitus) [3]
SENIOR.	1st.	Latin (Cicero & Juvenal	Latin(Juv'nl)& Rom Lit (3)	Greek(Plato)& Greek Literature or German
	2d.	Greek (Demosthenes),or Ger	Greek(Sophocles)or German	
	3d.			Constitutional Law
	4th.		Political Economy (4).	
	5th.	Psychology	Psychology and Ethics	Ethics and Ev. Christianity
	6th.	Anglo-Saxon.	Anglo-Saxon (3).	Anglo-Saxon and Gothic

Grammar and prose composition are taught throughout the course in each language.

HIGH SCHOOL DEPARTMENT—LANGUAGE COURSE

YEARS.	FIRST TERM.	SECOND TERM.	THIRD TERM.
FIRST.	Eng. Gram. & Comp'n.	Eng. Gram. & Composition	Eng. Gram. & Comp'n.
	Arithmetic	Arithmetic	Arithmetic
	U. S. History	U S. History	U. S. History
	Reading and Spelling	Reading and Spelling	Reading and Spelling
	Latin Gildersleeve'sGram. Jones's 1st. Lessons.	Latin Grammar & Lessons	Latin Grammar & Lessons.
	Drawing and Shop Work	Drawing and Shop Work	Drawing and Shop Work
SECOND.	Eng. Analysis and Comp'n.	Eng. Analysis and Comp'n	Eng. Analysis and Comp.'n
	Algebra	Algebra and Geometry	Geometry
	Latin Grammar, Composition, and Reader.	Latin (Caesar or Curtius)	Latin (Caesar or Curtius)
	El. Chemistry or Greek (3) Elocution (2)	El Physiology or Greek (3) Elocution (2)	El. Botany or Greek (3) Elocution (2)
	Drawing and Shop Work	Drawing and Shop Work	Drawing and Shop Work

SHORT NORMAL COURSE.

FIRST.	Eng. Gram and Comp'n	Eng. Grammar and Comp'n	Eng. Grammar and Comp'n
	Arithmetic	Arithmetic	Arithmetic
	U. S. History	U S History	U. S. History
	Reading and Spelling Methods of Teaching	Reading and Spelling Methods of Teaching	Reading and Spelling Methods of Teaching
	Physical Geography	Elementary Physics	Elementary Physics
	Drawing and Shop Work	Drawing and Shop Work	Drawing and Shop Work
SECOND.	Eng. Analysis and Comp'n.	Eng. Analysis and Comp'n	Eng. Analysis and Comp'n.
	Algebra	Algebra and Geometry	Geometry
	Elementary Chemistry (3) Elocution (2)	El Physiology (3) Elocution (2)	Elementary Botany (3). Elocution (2)
	Pedagogy	Pedagogy	Pedagogy
	Drawing and Shop Work	Drawing and Shop Work	Drawing and Shop Work

The satisfactory completion of the above course will entitle the student to a Certificate of Proficiency in the branches taught in the District Schools.

BUSINESS COURSE.

YEARS.	FIRST TERM.	SECOND TERM.	THIRD TERM.
FIRST.	English Gram. & Comp'n	English Gram. & Composition	English Gram. & Comp'n
	Arithmetic	Arithmetic	Arithmetic
	U. S. History	U. S. History	U. S. History
	Reading and Spelling	Reading and Spelling	Reading and Spelling
	Physical Geography	Book-keeping	Book-keeping
	Drawing and Shop Work	Drawing and Shop Work	Drawing and Shop Work
SECOND.	English Analysis & Comp	English Analysis & Comp'n	English Analysis & Comp'n
	Algebra	Algebra and Geometry	Geometry
	Book-keeping	Book-keeping (3). Commercial Law (2)	Book-keeping (3). Commercial Law (2)
	Elementary Chemistry (3) Elocution (2)	Elementary Physiology (3) Elocution (2)	Elementary Botany (2) Elocution (2)
	Drawing and Shop Work	Drawing and Shop Work	Drawing and Shop Work

The satisfactory completion of the above course will entitle the student to a diploma, conferring the distinction, Graduate in Business Science.

In all courses of study, original orations and essays will be periodically required of the Senior and Junior classes, and elocutionary exercises of the Sophomore and Freshman classes. Similar exercises may be required of the High School and Grammar School classes, at the discretion of the Faculty.

OUTLINE OF STUDIES.

PSYCHOLOGY, ETHICS, SOCIOLOGY, AND EVIDENCES OF CHRISTIANITY.

PRESIDENT EDGAR.

These important studies are taught inductively, no theory or doctrine being urged for acceptance which is not based upon a philosophical induction from the facts of consciousness. The student is taught to subject every statement of fact or principle to the test of his own experience. The fullest and freest discussion of opposing views is encouraged.

TEXT AND REFERENCE BOOKS.

Psychology—Bascom, Mahan, Porter, Sir William Hamilton.

Ethics—Alexander, Dagg, Bascom, Porter, Calderwood.

Sociology—Lectures.

Evidences of Christianity—Alexander, McIlwain, Butler.

ANCIENT LANGUAGES.

PROF. WILLIS.

The subjects taught in this department are the Latin Language and Literature and the History of Rome, the Greek Language and Literature and the History of Greece. Authors are read in the order of their difficulty, and neat written translations are required at stated intervals. The grammar and idioms of these languages are carefully studied and compared with those of English and other languages.

Marked attention is paid to the rendering of English into Latin and Greek. In the lower classes the best manuals for Latin and Greek composition are used; for the higher classes carefully graded exercises are prepared by the professor.

Due prominence is given to the study of the Latin and Greek metres. The grammars are made the basis of this instruction, but fuller explanation is given in lectures.

LATIN.

Freshman Class: Gildersleeve's Grammar, Jones's Latin Prose Composition, Cæsar (Greenough) 2 Books, or Nepos (C. & S.) 35 pages, Vergil (Greenough) 3 Books of Aeneid and Selections from Eclogues, Smith's Smaller History of Rome.

Sophomore Class: Harkness' Grammar, Harkness' Prose Composition, Cicero's Orations (Harkness) 50 pages, Odes of Horace (MacLeane), Livy (Lincoln) 60 pages.

Junior Class: Harkness' Grammar, Harkness' Prose Composition, Original Exercises, Livy 40 pages, Satires and Epistles of Horace, Tacitus (Tauchnitz).

Senior Class: Harkness' Grammar, Original Exercises, Cicero's Moral Works, Juvenal, (Leverett or MacLeane), Quackenbos's Roman Literature.

Books of Reference: Harper's Latin-English Lexicon, White's English-Latin Lexicon, Classical Dictionary, Classical Atlas, Zumpt's, Madvig's, and Roby's Latin Grammars.

Other authors may occasionally be substituted for those above when a change seems beneficial: (*e. g.*) Sallust, Ovid, Catullus, Tibullus, Propertius, Terence, Pliny.

GREEK.

Freshman Class: Goodwin's Grammar, Jones's Greek Prose Composition, Xenophon's Anabasis (Goodwin) 3 Books, Lysias (Stevens) 2 Orations.

Sophomore Class: Goodwin's Grammar, Jones's Prose Composition, Lysias, Herodotus (Mather) 40 pages, Homer's Iliad (Pratt and Leaf) 3 Books, Cox's Smaller History of Greece.

Junior Class: Goodwin's Grammar, Original Exercises, Demosthenes' Philippics or Olynthiacs, Euripides 2 Plays, Thucydides 1 Book.

Senior Class: Goodwin's Grammar, Original Exercises, Demosthenes De Corona, Sophocles 2 Plays, Plato, Quackenbos's Greek Literature.

Books of Reference: Liddell and Scott's Greek-English Lexicon (7th Oxford Edition), Yonge's English-Greek Lexicon, Classical Dictionary, Classical Atlas, Goodwin's Moods and Tenses, Hadley's or Curtius's Grammar.

ENGLISH, FRENCH, GERMAN AND MODERN HISTORY.

PROFESSOR EDWARDS.

ENGLISH.

After having been thoroughly drilled in English Grammar and Analysis and in the art of Composition, in the Preparatory Department, the student, in the Collegiate Department, is introduced to Elementary Rhetoric, with the object of teaching him to express his thoughts with elegance as well as accuracy; and is, subsequently, advanced to its higher treatment as the Science of Discourse. He is then ready to enter with profit and pleasure upon the study of the History of English Literature, and of the master-pieces of English Composition.

The senior year is devoted to the study of Anglo-Saxon, without which no English course is complete. Throughout the course great attention is paid to carefully graded exercises.

Freshman Class: Morris's Historical English Grammar, Bain's Rhetoric, Abbott's "How to Write Clearly," Lectures on the Science of Rhetoric. Bi-weekly exercises will be written, requiring a thorough reading of the following books: Longfellow's Evangeline, Last Days of Pompeii, David Copperfield, Idyls of the King, Macaulay's Essays.

Sophomore Class: Welch's English Literature, Johnson's English History. Bi-weekly exercises, as above, based on the following course of reading: Lady of the Lake, Childe Harold, Ivanhoe, Froude's History of England.

Junior Class: Hale's Longer English Poems, Peile's Philology, Morris's Outlines of English Accidence, Hamlet, Chaucer's Prologue, Morris and Skeat's Specimens of Early English. Following course of reading as basis for exercises: Bacon, Shakespeare, Spenser, Extracts from Ruskin.

Senior Class: Sweet's Anglo-Saxon Primer, Cook's Siever's Anglo-Saxon Grammar, Beowulf, Andreas' Handy Anglo-Saxon Dictionary, Lectures on Comparative Philology. Exercises, as before, on Milton's Areopagitica, Paradise Lost, Green's Making of England, Earle's History of Anglo-Saxon Literature, Chaucer.

FRENCH AND GERMAN.

Two years (five hours per week) are devoted to each of these languages. Conversation forms an essential element of the courses. The language taught will be used as the medium of communication in the class, and every effort will be made to enable the student to speak it fluently and correctly. The idea is to combine the "natural method" with the grammatical study necessary to a really useful knowledge of any language. French is put in the Freshman and Sophomore years, German in the Junior and Senior.

Freshman Class: Worman's First Book, Worman's Second Book, Worman's Grammaire Francaise, Saintsbury's Primer of French Literature, Etude Progressive de la Langue Francaise, Roman d'un Jeune Homme Pauvre, Voyage de Monsieur Perichon.

Sophomore Class: Eugene's Comparative Grammar, Worman's Grammaire, Harrison's Syntax, Petite Histoire du Peuple Francais, Brachet's Historical Grammar, Le Cid Andromaque, L' Avare, La Henriade, Gasc's Dictionary, Worman's Echo de Paris.

Junior Class: Worman's First German Book, Worman's Second German Book, Worman's Complete Grammar, Whitney's Reader, Conant's Primer of German Literature, Einer Muss Heirathen, Zriny.

Senior Class: Whitney's Grammar, Brandt's Grammar (for reference), Wallenstein, Emilia Galotti, Reisebilder, Schiller's Lyrics, Egmont, Lectures on History of Germany.

In all these classes constant oral and written translations from English into the foreign languages will be required.

MODERN HISTORY.

This subject, as seen by text-books above, will be taught in connection with the development of the literatures of the above three languages and in the classes studying the languages.

PURE MATHEMATICS AND LOGIC.

PROF. MURFEE.

MATHEMATICS.

This subject should be taught both practically and logically, serving in scientific investigations and mental discipline. It is not enough to find "answers," but the deductions must be based on established principles. First, the pupil performs the work in imitation of the teacher or author; then comparing facts learned he reasons on the subject, consults the text and books of reference, makes the deduction, and applies the law to new cases. The power of original investigation and the faculty of invention are thus strengthened, and the student, by the inductive process of combining known principles and making new deductions, can anticipate the author in his demonstrations.

For admission into the Freshman Class, the applicant must pass satisfactory examination in Arithmetic and in Algebra to Quadratic Equations. It is desirable that he should have studied three books in Geometry, and that he should have been thoroughly drilled in Mental Arithmetic.

All students must supply themselves with drawing instruments; for much attention is paid to original investigations, in which at least the dividers and protractor are essential.

Text-Books and Books of Reference—Algebra: Robinson's University, Wentworth's Complete, Wells' University. *Geometry:* Wentworth, Loomis, Welch and Chauvenet. *Trigonometry and Surveying:* Schuyler, Wells, and Wentworth. *Analytical Geometry:* Loomis and Todhunter. *Calculus:* Loomis and Church.

LOGIC.

Logic is taught, both from text-books and by lectures. Students are required to show its application in various scientific investigations. Essays from different authors are analyzed and discussed, with a view to the appreciation of sound reasoning and the detection of fallacies. Original discourses are required of students to impress the principles taught. In this way a subject, ordinarily regarded as dry, is made of the liveliest interest.

Text-Books and Books of Reference: Jevon-Hill, McCosh, Mill and Hamilton.

APPLIED MATHEMATICS—PHYSICS, ASTRONOMY, CIVIL AND MECHANICAL ENGINEERING.

PROFESSOR WHITHAM.

PHYSICS.

This course, which embraces recitations upon text-books, lectures, class illustrations, and experiments in the Physical Laboratory, is the basis of all scientific and technical instruction.

During the Freshman year a term is devoted to General Physics, a term to elementary experimentation in the Laboratory, and a term to Elementary Mechanics. In the Sophomore year a term is given to Electricity from an analytical standpoint, a term to the study of Heat and Thermodynamics, and a term to advanced Laboratory practice. The course in Laboratory practice consists in the manufacture of new apparatus, repairing apparatus, the deduction of laws, and the testing of principles taught. Students will elect the branch of physics they desire to pursue in the Laboratory, and will be required to keep a carefully written note book.

Text and Reference Books: Olmstead's College Philosophy, Peck's Elements of Mechanics, Thompson's Electricity and Magnetism, Larden's Heat, Ganot's Physics, Pickering's Physical Measurements.

ASTRONOMY.

A term is devoted to the study of Descriptive Astronomy. This is made interesting and profitable by the use of maps, globe, astral lantern, equatorial telescope, sextant and solar compass.

Scientific and engineering students will devote one term to Analytical Astronomy.

Text and Reference Books: Olmstead's College Astronomy, Norton's Astronomy, Pickering's Physical Measurements, Coffin's Navigation and Nautical Astronomy, The Nautical Almanac,

CIVIL ENGINEERING.

This course is based on the belief that a Civil Engineer should be a draughtsman and mechanic as well. That he may be a draughtsman, he is required to devote four years to topographical, mechanical, architectural, linear and isometrical perspective and free hand drawing. In order that he may be a mechanic, he is required to devote two years to shop-work. The course is also based on the idea that he should be a *theoretical* and *practical* engineer. In order that he may combine these qualities, the course is arranged to give him the maximum amount of field work allowable, and text-books from the best sources. He is required to make a practical application of all principles taught. It is intended that a graduate in this course shall be able to compete with those from the eastern Institutes of Technology.

In order to accomplish this end, engineering is not only the major but the minor course pursued after the Freshman year.

The course consists of recitations, lectures, drawing, field and shop work, civil engineering, and a short study of mechanical, mining, sanitary and hydraulic engineering.

Reference may be had to the course leading to the degree of C. E., described in this catalogue.

Text and Reference Books: Gillespie's Land Surveying and Higher Surveying, Surle's Field Engineering, Haupt's Topography, Smith's Topographical Drawing, Rankine's Civil Engineering and Applied Mechanics, Wheeler's Civil Engineering, Mahan's Civil Engineering, Alexander and Thompson's Elementary Applied Mechanics, Perry's Steam Engine, Haupt's Engineering Specifications and Contracts, Church's Descriptive Geometry, etc., Cotterell's Applied Mechanics.

MECHANICAL ENGINEERING.

This course is presented here for the first time, and was made possible only by the erection of work-shops during the past year. It is based on the belief that a mechanical engineer should be a mathematician, draughtsman, mechanic, and a thoroughly practical man, able to compete with graduates from Institutes of Technicology. The course leading to the degree of Mechanical Engineer (explained elsewhere in this catalogue), compares favorably with any proposed by older institutions. It is expected that this new course will supply engineers who can take the lead in developing the great resources of the State of Arkansas.

Text and Reference Books:' Shelley's Work-Shop Appliances, Church's Descriptive Geometry, Woods and Stahl's Elements of Mechanism, Alexander and Thompson's Applied Mechanics, Rankine's Applied Mechanics, Perry's Steam Engine, Rankine's Steam Engine and Other Prime Movers, Rankine's Machinery and Mill Work, Shock's Steam Boilers, Thurston's Friction and Lubrication, The Steam Engine by Marks, Cotterell's Applied Mechanics.

MINING ENGINEERING.

Students desiring to take this course can be provided for, as the first two years will be embraced in the civil and mechanical engineering course. It is proposed to add this course during the next session.

CHEMISTRY, MINERALOGY, GEOLOGY AND BIOLOGY.

PROF. PURINTON.

CHEMISTRY.

This course embraces inorganic, organic, analytical, agricultural and industrial chemistry, including the Chemistry of Light and Photography.

Instruction will be given by means of text-books, lectures, class illustrations and laboratory practice. The elementary principles of chemistry and chemical philosophy will be thoroughly taught, and the facts of chemistry will be impressed by copious experiments performed by the student. Blowpipe analysis, qualitative and quantitative analysis, assaying and metallurgy, will be taken up in proper order. After completing a suitable course of laboratory practice, the further practical study of chemistry by the student will be determined by the object he may have in view.

Text and Reference Books: Elliott and Storer, Appleton's Series, Clowe, Harcourt, Fresenius, Lupton, the Johnsons, Church, Rickets, Phillips, Wagner, Wurtz, Miller, Crook & Rohrig, Watt, Liebig.

MINERALOGY.

The study of Mineralogy includes the study of Crystallography with the occurrence, properties, forms and uses of the principal minerals. Determinative Mineralogy forms the most important part of the course, and is studied practically with the aid of lens, bagnet, blowpipe and simple analysis. Especial attention is given to the determination of the minerals and the assaying of the ores of the State.

Text and Reference Books: Dana, Brush, Plattner.

GEOLOGY.

This includes Lithological, Historical and Dynamical Geology. Prominence will be given to facts having an economic bearing. Especial attention will be paid to the formation of soils and deposits of valuable minerals in Arkansas. Field excursione form part of the regular course.

Text and Reference Books: LeConte, Dana, Geike, Lyell.

BIOLOGY.

This includes Botany, Anatomy and Physiology, Zoology and Entomology. Under *Botany* will be studied the structure, analysis and classification of plants—their geographical distribution and importance; favorable and unfavorable condition for life and growth; enemies, food, etc. In connection with the study of Botany, each student is required to collect, preserve, correctly classify and label, and deposit in the museum an herbarium of Arkansas plants.

Anatomy and Physiology will embrace the study of human anatomy, physiology and hygiene, including such subjects as digestion and foods, poisons and antidotes, respiration and ventilation, exercise and clothing. Under *Zoology* will be studied the classification and distribution of the forms of life upon the globe. Comparative Anatomy and Physiology, as preparatory to the study of stock-breeding, will recieve especial attention. In connection with the study of Zoology, instruction in practical Taxidermy and Skeleton mounting is given.

Entomology will be studied with special reference to its economic relations with agriculture and horticulture. In the biographical sciences, instruction will be given by text-book and lectures, but all students will be required to perform simple dissections and work with the microscope; prepare, mount and preserve specimens properly classified and labeled. The University is well equipped with microscopes, specimens and models.

Text and Reference Books: Gray, Bessey, Chapman, Martin, Huxley, Dalton, Carpenter, Flint, Darwin, Packard, Harris, Draper.

During the past year, the Chemical, Mineralogical and Biological Laboratories have been greatly developed by the addition of a gas supply, vacuum pumps, assay, combustion and blast furnaces, water sinks and taps, platinum and porcelain goods, choice chemical reagents, a cabinet of fine and rare minerals, comprising some valuable ores and native metals, an herbarium of more than 2500 plants, thirty-five stuffed and mounted birds, and one hundred preserved native bird skins.

A few species of Reptilia and Insectivora, and several fossils, minerals and native ores have also been added. A full set of photographic instruments and appliances are in use in the Chemical Laboratory for illustration in the study of the chemical properties of light.

Special attention will be given during the coming year to Microscopic Photography and the preparation of lantern slides. Instruction in Practical Photography will be given privately, at the discretion of the Faculty, to those who may desire it.

NORMAL DEPARTMENT.

PROFESSOR HOWELL.

The design of the Normal Department is to train teachers for the schools of the State. It will be the aim, in future, to make this one of the prominent features of the University, and so to co-ordinate its instruction to both the Preparatory and the Collegiate Departments as to make its benefits accrue to all grades of teachers, from the primary teacher to the college professor. The aims will be:

1. To lead pupils to think and investigate for themselves.

2. To train them in the best methods of imparting instruction without destroying their individuality.

3. To teach them how to organize, grade and discipline the various kinds of schools.

4. To give them a knowledge of school law, and especially of the duties of teachers as officers of the State.

5. To impart to them a valuable summary of the history of education.

6. To teach them the fundamental principles of Psychology and of the science of human conduct.

Text and Reference Books: Baldwin's and Kellogg's School Management, Parker's Talks on Teaching, Hewett's Pedagogy, The Practical Teacher, Volume VIII, Swett's Methods, Thring's and Page's Theory and Practice of Teaching, Browning's History of Education, Tate's Philosophy of Education, DeGraff's School-Room Guide, Bain's Education as a Science, Wickersham's School Economy and Methods, Compayre's History of Pedagogy.

POLITICAL SCIENCE.

Political Economy and Constitutional Law are embraced under this head.

The aim is to give a succinct statement of the undisputed principles of Political Economy, and to discuss conflicting views with all possible fairness.

The Constitution of the United States and of Arkansas, will be carefully studied, and an effort made to form a correct idea of the principles upon which our government was founded by a careful study of its history and institutions.

The work of this department will be distributed among the different Professors until it shall be feasible to create a distinct chair.

HIGH SCHOOL AND PREPARATORY STUDIES.

Students are not admitted into the lowest Preparatory class until they are thoroughly familiar with the fundamental principles of Arithmetic, viz : Addition, Subtraction, Multiplication and Division, and also Common Fractions. In Reading, they must be able to understand and intelligently render specimens of the grade of the Fourth Reader ; must have a knowledge of Primary English Grammar, Primary Geography, the rudiments of Penmanship, and the spelling of ordinary words of the grade of the Fourth Reader. These qualifications are the test of admission at the beginning of the session ; those applying later will be admitted only on the grade of the class.

In giving instruction in Reading, the aim is, first to develop in the student a full, complete and definite idea of the meaning of the sentence ; second, to obtain from him a natural, easy and graceful expression of the entire thought, as embraced in the sentence.

Spelling is required of students throughout the entire course, and an endeavor made to secure the accurate use of letters and other marks in the formation of words, and correct pronunciation.

English Grammar is taught by requiring the students to form sentences of their own, as well as to analyze and parse those of others.

In the Preparatory Classes, the student is chiefly confined to the simple constructions, the more systematic treatment of grammar and analysis being reserved for the High School grades. Lessons in Composition are given in all classes.

In Arithmetic, processes precede principles, and the object is to obtain, first, a full understanding of methods, then accuracy in work, and finally, rapidity.

Much importance is attached to Mental Arithmetic as a means for developing the power of analysis and for strengthening the mind. Both oral and writien exercises will be required daily.

In Commercial Arithmetic, the effort is made to make the instruction as practical as possible, so as to prepare the student for a correct understanding of every-day business transactions.

In Geography, the effort is to teach what is practically useful. With this in view attention is chiefly given to the natural features of the earth, its climatic conditions, the resources and products of the various countries, the great thoroughfares of commerce, and the localities of chief general interest. Map drawing is essential to this course.

Daily exercises in Penmanship are required.

In the first year of the High School course, United States History is substituted for Geography, and Latin is begun by those who propose a Classical course.

Classical students are thoroughly drilled in the Latin Grammar and are carried through a Reader and two books of Cæsar by the close of the second or Sub-Freshman Year. Greek is begun in the second year, which is devoted to a mastery of inflections, and elementary construction.

Students are exercised by frequent translations from English into Greek and Latin.

Algebra and Geometry are begun in the second year of the High School course.

In Algebra, students are thoroughly drilled in the elementary principles and required to master everything to equations of the second degree.

In Geometry, the elementary principles are taught both as a basis of instruction in Industrial Art and in preparation for Collegiate work.

Free-hand Drawing forms a part of the regular curriculum and is begun in the lowest Preparatory class. Drawing has a disciplinary, as well as a practical value, and also tends to refine the taste and polish the mind.

Elementary Natural Science is taught in those courses of the High School which do not embrace the classics. The experience of the past session in giving instruction in this line of study has been most satisfactory. The classes have been taught by the Professor of Chemistry and Biology, who has sought to give such an outline of scientific facts and principles as would prove valuable both to those students who propose to take a fuller course and to the larger number who drop out of school before reaching the Collegiate Department.

Text Books: Barnes' New National and Swinton's Readers, Ray's Practical Arithmetic, Thompson's Mental Arithmetic, Barnes' Higher Arithmetic, Mitchell's New Intermediate Geography, Greene's Grammars and Analysis, Chittenden's Composition, Wentworth's Algebra, Wentworth's Geometry, Gildersleeve's Latin Grammar, Jones' First Lessons in Latin, Gildersleeve's Latin Reader, Goodwin's Greek Grammar, Whiton's Three-Months' Preparation *for reading* Xenophon.

MUSIC DEPARTMENT.

PIANO FORTE.

This course will require six years for completion. Should the pupil possess marked talent and unceasing energy, it may be finished in less time.

FIRST YEAR.

Studies of the first principles of music, five-finger exercises, movement, scales, and such studies as will prepare the pupil for light classic composition of the Old Masters.

SECOND YEAR.

Practical exercises of Duvernoy, Czerny and Bach; introduction of such new movements of Liszt and Chopin as will prepare the pupil for work exclusively classic.

THIRD AND FOURTH YEARS.

Studies of Clementi, Heller and Bach, with especial attention to touch; introduction of more advanced movements of Liszt, that the pupil may be enabled to contend successfully with the moderately difficult classic compositions.

FIFTH AND SIXTH YEARS.

Advanced studies of Beethoven, Clementi and Cramer, and difficult compositions of Schumann, Liszt, Chopin, Hayden, etc.

VOCAL CULTURE.

FIRST YEAR

Will be devoted exclusively to forming of register and to producing evenness and natural tones of voice in register. Bassini's Art of Vocalization will be the theory used.

SECOND AND THIRD YEARS.

Pronunciation, timbre, science and art of breathing (diaphragm and clavicular), and art of phrasing; studies of Conconi and Bassini, with light selections from the Operas.

FOURTH AND FIFTH YEARS.

Colature, Messa di Voco, Portamento, and other vocal embellishments; studies of Garcia, Conconi, Rossini, etc., with the more difficult selections from the operas and classic compositions of Mendelssohn and others.

SIXTH YEAR.

Will embrace the first course in Opera Dramatic.

VIOLIN.

FIRST YEAR.

Practice of bowing, finger exercises, Manzas' Instructor.

SECOND YEAR.

Etudes of Dancla and arrangements from the Operas.

THIRD YEAR.

Kaiser's Etudes, Sonatas by Hayden, Schubert, etc.

FOURTH YEAR.

Krautzer's Etudes and compositions by De Beriot, Kreutzer, etc.

TERMS.

ONE LESSON PER WEEK.

Piano-forte	$ 9 00	per term.
Voice Culture	10 00	"
Violin or Guitar	9 00	"
Thorough Bass and Harmony	8 00	"
Theory and Composition	11 00	"
Use of Piano one hour every day	3 50	"

For two lessons per week the rates are double the above, except for use of piano.

One half of tuition must be paid in advance, balance at end of term.

No deductions will be made on account of absence from recitations except in cases of prolonged sickness; then the loss will be shared equally between student and teacher.

By a resolution of the Board of Trustees, at its recent meeting, the students of the Music and Art Departments will hereafter be required to matriculate and pay the usual fees and to be subject to the regulations applicable to other students.

INDUSTRIAL ART STUDIES.

These studies embrace drawing, designing, modeling, working in wood, metal, clay and other substances. They teach the art of producing an infinite variety of objects, both useful and ornamental; in short, *whatever lies at the foundation of the industries dependent alone upon human invention, skill and handiwork.*

It is surprising that it has been only in the last few years that the importance of training the eye, hand and judgment of youth in apprehending and working material things for pleasure and profit, has begun to be appreciated; and that our systems of education are being remodeled to include the aim of learning "to do" something as well as "to know" something.

How this double aim can best be accomplished, is the great educational problem of the day. The good results that have already been realized from the efforts made in Europe and in our own country, to solve this problem, are highly encouraging; and it is confidently believed that the "New Education," in which manual training shall go *pari passu* with the intellectual and the moral, in all grades of schools from the kindergarten to the university, will be the education of the future.

Appreciating the importance of inaugurating a system of Industrial Art training in the Arkansas Industrial University—a training which was one of the leading objects set forth in the Act of Congress of 1862, endowing the Land Grant Colleges, the Board of Trustees, in January 1885, asked the legislature to appropriate $10,000 for this purpose, but without success.

Notwithstanding the failure of the legislature to make the special appropriation asked for, the Board determined to make a beginning towards carrying out the object proposed, and accordingly set apart a portion of the regular annuity to provide instruction in manual exercises suited to both sexes. More than $3,000 was expended in providing a shop and in equipping it with engine, boiler, shafting, gearing and a limited number of machines and tools for working in wood and iron; and nearly $2,000 more, in securing an instructor in shop-work and one in drawing and handiwork for girls, and in supplying needful material and service.

As a necessary basis for all industrial art work, lessons in Free-hand Drawing were given, throughout the session, to all the students, except the seniors. The efforts in drawing were creditable to a majority of the students, while some of them produced for the inspection of the Boards of Trustees and Visitors, original designs of great merit. The girls were taught needlework of various kinds with satisfactory results. The shop-work of the young men, though begun as late as March, was sufficient to give the limited number that could be taught, some insight into the initial processes in wood and iron work and in the use of the machines and tools; while it demonstrated the usefulness of the instruction and the feasibility of training the mind and muscles together for useful ends without detriment to the intellectual training to be attained by the usual methods and courses. At its recent meeting, the Board of Trustees appropriated $1,000 for enlarging the shop so as to provide for the instruction of a larger number of students at one time, and $350 for affording instruction for the girls in wood-carving and brass-work.

It is hoped that the encouraging results which have attended the efforts, made upon a limited scale, to build up an Industrial Art Department in the University, will lead our next legislature to appropriate an adequate sum to make this department compare favorably with those of other institutions which make it their object to train the whole man—mind and body for the highest usefulness.

AGRICULTURAL STUDIES.

There has scarcely been a year since the organization of the University when important "branches of learning," "related to agriculture," have not been taught; but it is freely admitted that but little has yet been done towards applying the principles of science to the solution of the practical problem involved in the successful cultivation of the soil. This has been chiefly due to the fact that from the close of the civil war up to a recent period, the finances of Arkansas were in too unsatisfactory a condiction to justify the expenditure of the large sums necessary to provide adequately for giving varied practical instruction in this department. To have attempted this, would have required an outlay of money in arable land, buildings, stock, machinery and appliances for instruction, equal to the entire property investment of the University; while a much larger annuity than the institution has ever received, would have been necessary to have maintained the establishment and to have provided the student labor required to make it a blessing to the masses. But could such an effort have been successfully made fourteen years ago, it would have necessitated the abandonment of all other departments of the State's educational work by which thought and culture are promoted and men fitted for other employments—a result which few would admit could be compensated for by the highest success attainable by scientific agriculture. But the Arkansas of to-day is quite a different State from the Arkansas of ten years ago. Its population has doubled and its wealth trebled in that short period; and the undisputed debt of the State is not so great that it need be a source of anxious concern. Two years ago the Board of Trustees of the University thought that the time had come when they might reasonably ask the Legislature for a liberal appropriation for the Agricultural Department; but they failed to secure the $15,000 which was deemed necessary to enable them to make a favorable beginning towards supplying its needs. But notwithstanding this, the scheme has not been abandoned. Confident that the next Legislature cannot fail to make the needed appropriation, they have taken all the initial steps in their power to prepare for the work to be accomplished. They have spent a considerable sum in fitting up a new laboratory and equipping it for the analysis of soils and fertilizers as well as for general instruction in chemistry. They have bought the Harvey collection of plants, fossils and minerals, representing the flora and mineral resources of the State, and have otherwise increased the facilities for instruction in the Biological Department. They have authorized the Professor of Chemistry and Biology to put the farm in better condition, to plant out an orchard of trees and small fruits, to begin experimentation on a small scale in planting small plots in grains and grasses, and in cultivating the same by improved methods and with the aid of fertilizers of known chemical value. And though what has been done, and may yet be done, during the growing season is but a mere beginning, they have determined to use their utmost endeavors to have the Agricultural Department developed upon a scale commensurate with the wants of the State. It remains to be seen what response will be made by the Legislature to a more importunate call for the requisite means to go forward. Students who expect to adopt agriculture as a pursuit, are urged to enter upon the agricultural course marked out in the catalogue, relying upon the good sense and liberality of the people to supply all the practical as well as theoretical instruction they may need as they advance from class to class.

MILITARY DEPARTMENT.

The Military officers of the University consist of the President, Commandant and such assistant professors as may be assigned to duty in this department by the President. The President is head of the department and issues from time to time such general and special orders as he deems necessary to the efficiency of the military exercises and to the enforcement of order in the buildings and on the grounds.

The Commandant is charged with the details of the Military Department, and is responsible to the President for the efficiency of both drill and discipline.

This department is designed to impart to each male student not physically incapacitated to bear arms, theoretical and practical instruction in the school of the soldier, of the company, and of the battallion, and thereby furnish the State with a body of young men qualified to organize its militia.

Besides, the military drill is a superior health-giving exercise and promotes physical development, manly carriage, neatness, precision, order, and a habit of obedience which is a valuable aid in the enforcement of discipline.

The entire body of male students is divided into companies, which are officered by cadets, selected for proficiency in drill, good deportment and scholarship. The cadet officers are regarded as assistants in the enforcement of discipline, and their orders, while on duty, are considered as duly authorized, and must be obeyed accordingly.

Cadet officers are expected and required to be examples in military deportment and general good conduct.

A neat uniform, with brass buttons and suitable trimmings, is required to be worn by all males.

Parents and guardians will save money by postponing the purchase of winter suits for their children and wards until they arrive at Fayetteville.

CADET OFFICERS.

Staff.

T. H. Humphreys. W. E. Dickson.
1st Lieut. and Adjutant. *1st Lieut. and Quartermaster.*
G. A. Warren, *Sergeant Major.*

"A" Company.

B. J. Tillar, *Captain.* H. D. Wilkinson, *1st Lieutenant.*
F. A. Hippolite and A. B. Stone, *2d Lieut's.*
H. J. Hall, *1st Sergeant.* W. W. Powell, *2d Sergeant.*
D. C. B. Aikin, *1st Corporal.* J. C. McNeely, *2d Corporal.*

"B" COMPANY.

J. H. BATES, *Captain.* A. V. GIBSON, *1st Lieutenant.*
B. C. DUFFIE, *2d Lieutenant.*
J. H. HOBBS, *1st Sergeant.* N. F. DRAKE, *2d Sergeant.*
G. V. SKELTON, *1st Corporal.* S. A. DOWNES, *2d Corporal.*

COLOR GUARD.

LEE TREADWELL, *Color Sergeant.*

CORPORALS.

P. BOWLES, W. T. GUNTER, M. DANAHER, A. G. TAFF,
W. E. DUNAWAY, J. T. VALENTINE, S. F. DOWELL,

BAND.

C. A. DAVIES, *1st Sergeant and Drum Major.*
E. L. PARKER, *Leader.*

MEMBERS.

F. O. ROBERTSON, T. I. THORNTON, C. E. FAULKNER,
M. DIBRELL, F. W. REED, J. L. REED, W. L. REED,
W. J. SAVAGE, J. C. VAUGHAN, M. HULSE, M. DEAN,
A. W. SHREVE, J. B. BRICKELL, J. F. HARRIS.

At the competitive drills during Commencement Week, 'B" Company won the honor of carrying the Battalion Colors during the session of 1886-87, and the Cadet Officers of the Battalion presented a gold medal to Cadet J. H. Gaines for being the best drilled private.

POST GRADUATE COURSES.

Requirements for the Degree of Master of Arts (M. A.)

Applicants for this degree must have previously taken the degree of B. A., and in addition must take at the University, for a full scholastic year, four daily studies appointed by the faculty.

Requirements for the Degree of Master of Science (M. S.)

Applicants for this degree must have previously taken the Degree of B. S., and in addition must take, at the University, for a full scholastic year, four daily studies appointed by the faculty.

Requirements for the Degree of Doctor of Philosophy (Ph. D.)

1. This degree will be conferred for distinguished attainments, as shown by examination and thesis, in any one of the five following languages: Latin, Greek, German, French and English, together with subordinate attainments in two others of the five; or, for distinguished attainments in any one principal and two subordinate of the following sciences: Chemistry, Physics, Geology, Biology; or, for distinguished attainments in Philosophy or in Pure and applied Mathematics.

2. This degree shall be open to persons who have received the Degree of B. A. or B. S., at this or other reputable institutions, or C. E., or M. E. from this institution; or to any person who can, by a thorough examination, show attainments equal to those indicated by these degrees.

3. No applicant shall be admitted to examination for this degree before two full scholastic years from the date of his admission to the course, shall have passed. The last of these two years must be passed by the candidate in resident study at the University.

4. Applicants for this degree must state in their application what particular line of study they wish to pursue.

5. A thesis, showing original research shall be required of every applicant, the subject of which shall be announced and passed upon by a committee of the faculty at least one year before the time set for the final examination, and the thesis itself must be presented to the committee two months before admission to the examination. Twenty-five copies of the approved and printed thesis shall be placed in the University Library.

6. All applicants for this degree, who have previously taken the B. S.; M. S.; C. E.; or M. E. Degree, must by the end of the first year of the course, be sufficiently conversant with French and German to read with ease any scientific work written in these languages.

DISTINCTIONS

CONFERRED AT COMMENCEMENT, JUNE 10, 1886.

Upon the recommendation of the faculty, the following degrees were conferred by the Board of Trustees:

Bachelor of Arts—Misses Mai Middleton, Mary Leverett, Sara Mulholland and Messrs. B. J. Tillar and James H. Bates, members of the Senior Class.

Doctor of Philosophy—J. C. White, Professor of Geology and Mineralogy, University of West Virginia, and Assistant Geologist, U. S. Geological Survey.

The following students received diplomas in the Business Course:

Samuel F. Dowell, Benj. J. Mosley, Albert S. Brown, Wm. H. Johnson, John H. Gaines, Abner E. Northrop, John H. Sloan, Abner Webb and Robert D. Harris.

A gold medal, offered by B. H. Stone of Fayetteville, for the best essay by any student on a subject selected by the faculty, was awarded by a committee of the Honorable Board of Visitors, to F. P. Turner of Franklin County.

A gold medal was awarded to Miss Ida Pace of Fayetteville by the Mathetian Society for the best essay submitted by the competitors for that honor.

GENERAL INFORMATION.

The aims of the University are set forth in the following sections of the Acts of Congress and of the General Assembly of Arkansas under which it was established:

The Act of Congress of 1862, appropriating lands to establish colleges in the states, provides that all moneys derived from their sale "shall be inviolably appropriated by each state which may take and claim the benefit of this Act, to the endowment, support, and maintenance of at least one college, where the leading objects shall be, *without excluding other scientific and classical studies*, and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts, in such manner as the legislatures of the states may respectively prescribe, in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions of life."

(U. S. Statutes, Vol. 61, Stat. 7, Sec. 4.)

Our own General Assembly, in accepting the original grant and in creating the University, provides that the fund realized therefrom, "shall be forever devoted and applied to the endowment and maintenance, under such laws or articles of incorporation as may be by the General Assembly hereafter provided, of an institution of learning to be styled, 'The Arkansas Industrial University,' wherein shall be taught *in addition to the usual course of study prescribed in Universities*, the science and practice of Agriculture, the Mechanic Arts, Engineering and Military Science and Tactics." (Act. of July 23, 1868.)

It was clearly the purpose of Congress in the Act above quoted to provide for the maintenance of colleges, whose leading objects should be "to teach such branches of learning as are related to Agriculture and the Mechanic Arts;" but the Act as plainly provides that the course of instruction shall include "Military Tactics" and shall not exclude "other scientific and classical studies." It, therefore, admits of the organization of schools upon a broad University basis, provided their leading objects shall conform to the letter of the law as already indicated; for, when thus organized, will they most surely "promote the liberal and practical education of the industrial classes in the several *pursuits and professions of life*." How they should be made to subserve the ends designed, was wisely left to "the legislatures of the states to prescribe." In accepting our State's quota of the land scrip and in chartering the Arkansas Industrial University, the General Assembly evidently designed that the "usual course of studies prescribed in Universities" should be taught, though in addition thereto. it provided for the other features mentioned in the closing sentence of the Act.

It is the purpose of the Board of Trustees to endeavor to develop the institution in accordance with the spirit of the above acts. The means at their command have not been adequate to the development of all the departments of instruction contemplated therein, or to the purchase of the fullest appliances for illustration and practice for those already embraced in its curricula; but they believe that quite an advance has been made in the past two years in perfecting the organization and in promoting the efficiency of the institution, and that with the aid of liberal appropriations by the legislature, it will soon bear favorable comparison with similar institutions in the older and wealthier states, in the advantages it shall offer for the training suited to the varied wants of its youth.

LOCATION.

The Arkansas Industrial University is located within the corporate limits of the town of Fayetteville, Washington county. The location is thought to be unsurpassed by any other locality in the State, in salubrity of climate, beauty of surrounding scenery, fertility of soil, variety and perfection of agricultural and horticultural productions, and in the morality and intelligence of its people.

PROPERTY.

The property of the University consists of the proceeds of the munificent grant of land by Congress, the bonds of Washington county, and of the town of Fayetteville, the appropriations made by the State, and the University farm and lands—amounting in all to $300,000 in value.

ACCESSABILITY.

Students may reach Fayetteville from both the north and the south by daily trains on the Arkansas branch of the St. Louis & San Francisco Railroad, which now connects on the south with the Little Rock & Fort Smith Railroad at Van Buren.

Students, on arriving at Fayetteville, must report at once to the President of the University. No student will be allowed to recite in any class until properly enrolled, but will be held responsible for his conduct from the time of his arrival in Fayetteville.

CALENDAR FOR THE SCHOLASTIC YEAR 1886–87.

The session will commence on Wednesday, September 1, 1886, and close June 1, 1887.

WITHDRAWAL OF STUDENTS.

Parents, or guardians, who wish to withdraw their children or wards from the University, should write to the President of the Faculty, stating their wishes. Unworthy students sometimes deceive the Faculty by pretending that their parents desire them to return home. No honorable discharge will be given to a student under age, who is unable to produce the written application of his parent or guardian for his withdrawal, or if his number of demerits shall exceed the proportion of two hundred allowed during the session. Nor will an honorable discharge be given to a student under censure of any kind, whether for neglect of duty, or other cause, even though he may have the consent of his parent or guardian for his withdrawal from the University.

RESTLESSNESS.

The greatest obstacle to-day, in the way of successful educational work, is the restlessness and lack of persevering pluck in American youth. We find that the vast majority of our students do not come to the University with any thought of remaining until graduation, and many think they have accomplished wonders by remaining a single term of three months. Those who exhibit such a deplorable lack of pertinacity in youth, can scarcely be expected to succeed in after life. They will succumb under the first serious difficulty. Parents who yield to the importunities of their children to quit school, because of some discouragement, do thereby foster in them a weakness which must be fatal to all vigorous manhood and healthful development. We hope that the students who come up in September, will come with the determination to let no slight impediment turn them back from the path that leads to knowledge, honor and usefulness.

BOARDING HOUSES.

Students are required to board at such places as are approved by the Faculty, and are under the supervision of the President of the University. No change of boarding house will be allowed, except at the end of each term, unless under extraordinary circumstances, nor without the permission of the President.

If at any time the influence of a boarding house be found pernicious, boarders will be removed at the instance of the Faculty.

EXPENSES.

Board, including fuel, lights and washing, may be had with families living in or around Fayetteville at from $12 to $16 per calendar month. Day boarding is sometimes obtained at from $8 to $10 per month.

In order to lighten the expenses of students of limited means, the Board of Trustees, one year ago, authorized the Faculty to open a boarding house on the College grounds, where good substantial fare might be furnished to from forty to fifty boys at cost. To effect this purpose, the old refectory was thoroughly repaired, and the dining-room and kitchen furnished at the expense of the University. At the request of the Faculty, one of the professors took charge of the establishment at the opening of the session, and under his careful supervision it was so conducted that good, substantial table board was furnished the students for less than $8 per month. The house was full during the entire session, but it is to be regretted that it will not comfortably accommodate more than fifty students. The arrangement will be continued during the ensuing session. Students who board on the grounds are expected to provide their own furniture, fuel and lights. Before entering the boarding house, they are required to promise to conform to such regulations as to study, the preservation of order, visiting, leaving their quarters and the care of their rooms as may be prescribed by proper authority.

Our next Legislature will be asked to make an appropriation to build substantial brick dormitories and mess halls, with all mordern conveniences, and with ample accommodations for the students of both sexes. It is hoped that the requisite means will be supplied to meet this want.

Hereafter, all students, whether in the Collegiate or Preparatory classes, who have not Normal or Beneficiary appointments, will be required to pay a tuition of $30 per session of forty weeks—one-half at the beginning and the balance in the middle of the session.

All Normal and Beneficiary students and all *new* students, on entering, are required to pay a matriculation fee of $5.

No student will be enrolled till all fees are paid, and no tuition fees will be refunded, except in cases of sickness causing continuous absence of not less than six weeks.

Hereafter, the usual fee of $5 will be charged those who receive regular diplomas, and $2.50 to those who receive Business diplomas.

POCKET MONEY.

The Faculty would advise parents to allow their sons but little pocket money. It has been well said in regard to students, that "a pocket full of money and a head full of sense are seldom found together." Money can be sent monthly for the payment of boarding and other necessary expenses. Postal orders can always be cashed at the Post Office in Fayetteville. The President of the Faculty cannot personally take charge of the financial affairs of students.

LITERARY SOCIETIES.

In the Collegiate Department there are two literary societies, the "Mathetian" and "Philomathean." Students who are members of the Sub-Freshman class, are also eligible to membership in these.

Literary Societies may be organized in the High School and Preparatory Departments under proper restrictions. At present there is but one in operation, the Garland Society, organized during the past session.

LIBRARY AND READING ROOM.

The University Library, containing nearly 3,000 volumes, comprises many valuable works, and additions are constantly being made. Nearly all the newspapers of the State of Arkansas, and several from other States have been generously furnished to the Library either by the publishers or by other friends of the University. The best magazines of America and some from England, France, and Germany are also purchased. All these are kept on file in the Library, and students have access to them, as well as to the books, at certain hours each day. No Library fee is charged, but a deposit of $2 is required to insure proper care of the books taken from the Library.

APPARATUS AND MUSEUM.

The University is supplied with no inconsiderable amount of apparatus for illustrating the different scientific departments and for the prosecution of original work.

Valuable additions have been made in the last year to the Chemical and Physical Departments. Appropriations are made by the Board of Trustees, annually, for the purchase of needed supplies.

CABINET AND MUSEUM.

The cabinet of minerals consists chiefly of a collection of State minerals, contributed by various parties of the State, and by the professors; but it has been recently enlarged by purchase and embraces, besides, specimens of value from other States.

It is hoped that the day is not far distant when, by exchange and purchase, the institution will secure an ample supply of specimens for the illustration of the minerals and fossils of our own and other countries.

There has been constructed an herbarium case large enough to hold the indigenous plants of North America and such exotics as are of economic value, It will be the work of years to complete a collection of the plants of North America, but the work is progressing. A valuable addition was made last summer by the purchase of Prof. Harvey's collection of the plants of Arkansas,

There are about 500 species of animal specimens, to illustrate the various departments of zoology.

Collections in all the departments are slowly accumulating.

APPOINTMENT OF BENEFICIARIES.

All appointments should be completed, if possiple, before the opening of the autumn term. The County Judges, who make the appointments, should prepare duplicate notifications of appointments, one of which should be forwarded to the President of the University, and one to the Secretary of the Board of Trustees; and in case the appointee fails to appear at the University within twenty days after an appointment (except in case of sickness), he or she will be regarded as having declined the appointment, in which case it will be the duty of the President of the Faculty to notify the person making the appointment of such failure, and he, in turn, should make another appointment as soon thereafter as possible; such other appointee being required to appear at the University as soon as possible after appointment. The President of the Faculty shall continue to notify appointing officers until their respective number of appointees make their appearance at the University.

All beneficiary and normal students should be present at the opening of the autumn term; and unnecessary delay, either of old students in returning, or new ones reporting, will lead to the forfeiture of their appointments.

QUALIFICATIONS.

The attention of County Judges is called to the fact that *neither Normal nor Beneficiary Students will be admitted, unless they have the following qualifications:*

Students are not admitted until they have become familiar with the fundamental principles of arithmetic, viz: addition, subtraction, multiplication and division, and also of common and decimal fractions. In reading, they must be able to understand and intelligently render specimens of the grade of the Fourth Reader, must have a knowledge of primary English grammar, primary Geography, the rudiments of penmanship, and the spelling of ordinary words of the grade of the Fourth

Reader. These qualifications are the test of admission at the beginning of the session; those applying later will be admitted only on the grade of the class.

The sole object of the Normal Departmedt being the training of teachers for the Public Schools of the State, the attention of County Judges is respectfully called to the following considerations:

Only such persons should be appointed to this Department as really intend to teach, and, if possible, those who have had some experience in teaching.

All who enter this department will be required to take the course of training prescribed, to fit them for teaching.

APPOINTMENT.

As much trouble and annoyance is caused by students who have been appointed as Beneficiaries or Normals coming without any evidence of appointment, the following are adopted as the proper forms of notice to be given by the Judge of County Court to the President of the University and the Secretary of the Board of Trustees, upon the appointment of Beneficiary and Normal Students by the County Court, or the Judge thereof, in accordance with the sixth section of an Act approved March 6, 18875:

[*Form* 1.—*Appointment.*]

No............ [To be given to the student.]

To whom it may concern:

I hereby appoint........................of........... .... County, State of Arkansas, as a Benificiary (or Normal, as the case may be), to the Arkansas Industrial University.

Given under my hand, this...........of...........188....

....

Send a notice like the following to the President of the University, and one to the Secretary of the Board of Trustees, at Fayetteville.

[*Form 2.—Notice to President of the University.*]

....Arkansas. }
.... }

To the......................... *University:*

I hereby notify you that I have this day appointed................

....of...........................County, State of Arkansas, a Beneficiary (or Normal, as the case may be), to the Arkansas Industrial University.

Given under my hand, this................day of................

188....

....

BENEFICIARY AND NORMAL APPOINTMENTS.

It is provided in Section 18, of the Act of the General Assembly establishing the University, that the Board of Trustees shall have power to "prescribe the grade and number of scholarships, and prescribe the rules by which pupils who are to be admitted free, shall be elected equally from the various parts of the State." They have, therefore, made provision for 600 Beneficiaries, who will be entitled to four years free tutition, and 400 Normal students, who are also entitled to four years free tuition. These are apportioned among the several counties according to their respective populations by the United States census of 1880, which apportionment is as follows:—[See Apportionment Table on succeeding page.]

COUNTIES	Beneficiaries.	Normals.	COUNTIES.	Beneficiaries.	Normals.
Arkansas	6	4	Lee	10	6
Ashley	8	5	Lincoln	7	5
Baxter	4	3	Little River	4	2
Benton	15	9	Logan	11	8
Boone	9	6	Lonoke	9	6
Bradley	5	3	Madison	9	6
Calhoun	4	3	Marion	6	4
Carroll	10	6	Miller	7	5
Chicot	7	5	Mississippi	5	4
Clay	5	8	Monroe	7	5
Clark	12	3	Montgomery	4	3
Cleburne	5	3	Nevada	10	7
Cleveland	6	4	Newton	4	2
Columbia	11	8	Ouachita	9	6
Conway	10	6	Perry	2	1
Craighead	5	3	Philiips	16	10
Crawford	11	8	Pike	5	3
Crittenden	7	4	Poinsett	2	1
Cross	4	2	Polk	4	3
Dallas	5	4	Pope	11	8
Desha	7	4	Prairie	6	4
Drew	9	6	Pulaski	25	18
Faulkner	11	6	Randolph	9	6
Franklin	10	8	Saline	7	5
Fulton	5	3	Scott	7	4
Garland	7	4	Searcy	5	4
Grant	5	3	Sebastian	15	12
Greene	5	4	Sevier	5	3
Hempstead	14	10	Sharp	7	5
Hot Spring	6	4	Stone	4	4
Howard	7	5	St Francis	6	4
Independence	13	8	Union	10	6
Izard	8	6	Van Buren	7	4
Jackson	9	6	Washington	18	12
Jefferson	17	12	White	13	8
Johnson	9	6	Woodruff	7	5
Lafayette	4	2	Yell	11	7
Lawrence	6	4			

There is also one "Honorary Scholarship" to each county, to be selected for superior merit and proficiency from the public schools of each county, according to Section 2, of Act July 23, 1868.

SALE OF ARDENT SPIRITS NEAR THE ARKANSAS INDUSTRIAL UNIVERSITY.

By an Act of the General Assembly of the State of Arkansas, approved March 6, 1875, it is unlawful for any person to sell or give any vinous or ardent spirits within three miles of the Arkansas Industrial University, unless it be prescribed by a regular practicing physician, for medical purposes.

WINTER VACATION.

By resolution of the Board of Trustees, the next Winter Vacation will extend from Thursday evening, December 23d, to Monday, December 27.

Application for catalogues or blanks for Beneficiary Appointments should be addressed to Col. J. L. Cravens, Regent and Secretary, Fayetteville, Ark.

Branch · Normal · School

AT PINE BLUFF.

This Branch of the Normal Department of the Arkansas Industrial University was established by the General Assembly for the purpose of securing an adequate supply and properly trained teachers for the public colored schools of the State. Its terms, course of study, sessions, etc., correspond with those of the Normal Department at Fayetteville, and each county judge is entitled to appoint as many colored beneficiaries to the institution at Pine Bluff as his county is allowed, under the apportionment, to send white ones to Fayetteville; consequently the two classes of appointments do not interfere with each other. The expenses of a student at Pine Bluff, for board and washing, need not exceed $12 per month, and a number of those who have heretofore attended have managed to reduce their expenses very materially by labor.

For further information address the Principal,

PROF. J. C. CORBIN,
Pine Bluff, Ark.

FIFTEENTH CATALOGUE

OF THE

ARKANSAS INDUSTRIAL UNIVERSITY

FAYETTEVILLE, WASHINGTON COUNTY, ARK.,

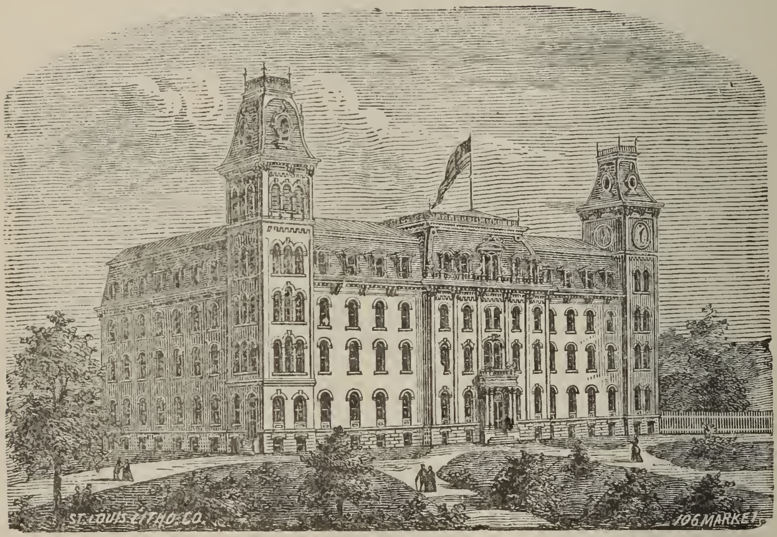
FOR THE YEAR ENDING JUNE 9, 1887,

AND

ANNOUNCEMENT FOR 1887-88.

LITTLE ROCK, ARK.
GAZETTE PRINTING CO.
1887.

ARKANSAS
INDUSTRIAL UNIVERSITY.



DIMENSIONS AND CAPACITY.

It is 214 feet long by 122 feet wide, covering an area of 26,108 square feet. It is five stories high, with French or Mansard roof, covered with slate or tin. The height of the building is 134 feet.

The basement story is built of stone; the foundation is bedded with solid rock. The next three stories are built of brick, and the attic of wood. The basement story is in height 13 feet in the clear; first and second stories 16 feet each; third and fourth, 12 feet; the clock and bell towers extending two stories above attic.

There are ten rooms 77 by 61 feet, ten rooms 22 by 29 feet, ten rooms 22 by 28 feet, ten rooms 22 by 25 feet, ten rooms 22 by 22 feet, ten rooms 22 by 19 feet, five rooms 15 by 28 feet, four rooms 22 by 20 feet, and one room 74 by 50 feet—making a total of seventy rooms. In addition, there are four corridors 15 by 28 feet and four corridors 14 by 210 feet.

BOARD OF TRUSTEES.

EX-OFFICIO PRESIDENT OF THE BOARD,
His Excellency, SIMON P. HUGHES, Governor, Little Rock, Ark.

SECRETARY AND TREASURER,
J. L. CRAVENS, *Fayetteville, Ark.*

TRUSTEES.

HON. W. F. AVERA	Camden, Ark
HON. W. M. FISHBACK	Fort Smith, Ark
HON. J. W. KEESEE	Latour, Ark
HON. JAS. MITCHELL	Little Rock, Ark
HON. W. B. WELCH, M. D.	Fayetteville, Ark
HON. C. M. TAYLOR, M. D	South Bend, Ark

EXECUTIVE COMMITTEE:
GOVERNOR S. P. HUGHES, W. B. WELCH, J. W. KEESEE
JAS. MITCHELL.

FINANCE COMMITTEE:
W. M. FISHBACK AND W. F. AVERA.

BRANCH NORMAL:
GOVERNOR S. P. HUGHES, C. M. TAYLOR, W. F. AVERA.

AGRICULTURAL COMMITTEE:
J. W. KEESEE, W. M. FISHBACK, W. F. AVERA.

MECHANICAL COMMITTEE:
W. B. WELCH, JAS. MITCHELL, C. M. TAYLOR.

COMMITTEE ON RULES AND BY-LAWS:
J. W. KEESEE, W. M. FISHBACK, W. B. WELCH.

PRINTING COMMITTEE:
W. F. AVERA, W. M. FISHBACK.

BOARD OF TRUSTEES, MEDICAL DEPARTMENT.

J. A. DIBRELL, JR., M. D.,
Little Rock.

WILLIAM M. LAWRENCE, M. D.,
Batesville.

WILLIAM THOMPSON, M. D.,
Little Rock.

OFFICERS AND INSTRUCTORS.

*...
President, Professor of Mental Philosophy and Ancient Languages.

J. M. WHITHAM, A. M., (Late Assistant Engineer U. S. Navy),
Superintendent Mechanic Arts and Professor of Engineering.

GEO. D. PURINTON, A. M.,
Superintendent Agriculture and Professor Chemistry and Mineralogy.

E. H. MURFEE, A. M., LL. D.,
Professor of Mathematics, Logic and Astronomy.

HOWARD EDWARDS, A. M.,
Professor of English, History and Modern Languages.

F. W. SIMONDS, Ph. D.,
Professor of Biology, Geology and Physics.

*...
Instructor in Tactics and Commandant of Cadets.

J. F. HOWELL, A. M.,
Instructor in Pedagogics and Senior Assistant.

R. H. WILLIS, A. M.,
Adjunct Professor of Ancient Languages.

W. E. ANDERSON,
(Grad. Miller M. L. School and late Engineer Student Univ. of Va.),
Adjunct Professor of Mechanic Arts and Instructor in Mechanical Drawing.

* To be filled.

OFFICERS AND INSTRUCTORS.

*..,
Adjunct Professor of Chemistry and Agriculture.

G. W. DROKE, A. M.,
Assistant in Preparatory Department.

MISS ANNIE WAGGENER,
Assistant in Preparatory Department.

*..,
Assistant to be Elected.

*..,
Assistant to be Elected.

MISS KATIE V. KING,
Instructor in Music.

MISS LIBBIE M. HALL, B. P.,
Instructor in Ladies' Industrial Art.

J. W. MAYO, (Grad. Miller M. L. School of Va.),
Instructor in Iron Work.

*..
Instructor in Wood Work.

LEWIS C. GARDNER, (Grad. Chicago Man. Training School).
Instructor in Foundry and Forging.

*..
Foreman of Farm.

LEE TREADWELL,
Instructor in Field Engineering.

WM. FRENCH,
Janitor and Engineer.

---

* To be filled.

MEDICAL DEPARTMENT.

SESSION OF 1887-8.

LOCATED AT LITTLE ROCK, ARKANSAS.

PROFESSORS.

P. O. HOOPER, M. D.,
Emeritus, Practice of Medicine.

EDWIN BENTLEY, M. D.,
Institutes and Practice of Surgery.

JAS. A. DIBRELL, JR., M. D.,
General, Descriptive and Surgical Anatomy, and President of Faculty.

A. L. BREYSACHER, M. D.,
Obstetrics and Diseases of Women and Children.

JOHN J. McALMONT, M. D.,
Meteria Medica, Therapeutics, Hygiene and Botany.

JAMES H. SOUTHALL, M. D.,
Practice of Medicine.

ROSCOE G. JENNINGS, M. D.,
Clinical Surgery and Dermatology.

W. G. MILLER, M. D.,
Medical Chemistry and Toxicology.

L. P. GIBSON, M. D.,
Demonstrator of Anatomy.

T. E. MURRELL, M. D.,
Ophthalmology and Otology.

JAMES H. LENOW, M. D.,
Diseases of Genito-Urinary Organs.

CLAIBORNE WATKINS, M. D.,
Physical Diagnosis and Clinical Medicine.

LOUIS R. STARK, M. D.,
Gynæcology.

JOHN WATERS, M. D.,
Institutes of Medicine.

F. L. FRENCH, M. D.,
Prosector of Anatomy.

W. U. SIMONS, U. S. SIGNAL SERVICE,
Meteorology, Etc.

J. N. Craig, Janitor, at the College, on Second, between Main and Louisiana Sts.

All communications should be addressed to

R. G. JENNINGS, M. D., Secretary of Faculty, Little Rock, Ark.

CATALOGUE OF STUDENTS.

SESSION 1886-7.

COLLEGIATE DEPARTMENT.

JUNIOR CLASS.

Bowles, Preston	Hancock, Washington County, Md.
Crozier, W. N	Fayetteville, Washington County, Ark.
Danaher, M	Little Rock, Pulaski County, Ark.
Dickson, W. E	Magnolia, Columbia County, Ark.
Drake, N. F	Cincinnati, Washington County, Ark,
Hall, H. J	Fayetteville, Washington County, Ark.
Hobbs, J. H	Bentonville, Benton County, Ark.
Pace, Ida	Fayetteville, Washington County, Ark.
Powell, W. W	Melbourne, Izard County, Ark.
Schoff, G. C	Annapolis, Maryland.
Treadwell, Lee	Toledo, Cleveland County, Ark.
Warren, G. A	Hazel Grove, Independence County, Ark.
Flynn W. N. (Irreg.)	Fayetteville, Washington County, Ark.
Obenshain, Ora (Irreg.)	Fayetteville, Washington County, Ark.
Polson, Alice (Irreg.)	Southwest City, McDonald County, Mo.
Total	15.

SOPHOMORE CLASS.

Aiken, D. C. B	Fayetteville, Washington County, Ark.
Downs, S. A	Nashville, Howard County, Ark.
Edgar, Gertrude D	Fayetteville, Washington County, Ark.
Fishback, L. F	Fort Smith, Sebastian County, Ark.
Ganaway, J. R	Warren, Bradley County, Ark.
Humphreys, G. A	Fort Smith, Sebastian County, Ark.
Harrison, Grace	Washington, D. C.

McNeely, J. C.	Little Rock, Pulaski County, Ark.
Morrison, M. D.	Osage Mills, Benton County, Ark.
Slagle, Ida	Siloam, Benton County, Ark.
Southerland, J. W.	Hindsville, Madison County, Ark.
Taff, A. G.	Waldron, Scott County, Ark.
Taff, Mollie	Waldron, Scott County, Ark.
Taff, J. A.	Waldron, Scott County, Ark.
Taff, J. H.	Waldron, Scott County, Ark.
Tillman, Annie	Fayetteville, Washington County, Ark.
Wade, J. M.	Blanchard's Springs, Union County, Ark.
Wheeler, J. N.	Warren, Bradley County, Ark.
Williams, H. E.	Fayetteville, Washington County, Ark.
Total	19.

FRESHMAN CLASS.

Arbuckle, J. D.	Charleston, Franklin County, Ark.
Abernathy, Hettie	Warren, Bradley County, Ark.
Bates, W. R.	Cincinnati, Washington County, Ark.
Brown, A. S.	Charleston, Franklin County, Ark.
Brown, Jno	Belmont, Crawford County, Ark.
Bruce, T. V.	Fort Smith, Sebastian County, Ark.
Blanks, W. L.	Hamburg, Ashley County, Ark.
Dowdle, T. A	Morrilton, Conway County, Ark.
Edgar, Bessie	Fayetteville, Washington County, Ark.
Fakes, W. B	Riverside, Woodruff County, Ark.
Falconer, W. A.	Charleston, Franklin County, Ark.
Gunter, W. T.	Fayetteville, Washington County, Ark.
Haney, W. W	Bentonville, Benton County, Ark.
Harris, R. D	Melbourne, Izard County, Ark.
Hervey, W. R	Morrilton, Conway County, Ark.
Huckleberry, J. H.	Van Buren, Crawford County, Ark.
Irvin, R. W.	Fayetteville, Washington County, Ark.
Kemp, Elzie	Fayetteville, Washington County, Ark.
Kinsworthy, J. H	Mineral Springs, Howard County, Ark.
Magness, J. W.	Fayetteville, Washington County, Ark.
Martin, Mack	Hackett City, Sebastian County, Ark.
Millsaps, N	Fayetteville, Washington County, Ark.
Morrow, Mattie	Fayetteville, Washington County, Ark.
Murphy, A. J	Hot Springs, Garland County, Ark.
Pace, Frank	Fayetteville, Washington County, Ark.
Park, P. J	Cabot, Lonoke County, Ark.
Patton, W. J.	Little Rock, Pulaski County, Ark.
Pearce. L.	Magnolia, Columbia County, Ark.
Pittman, Jennie	Fayetteville, Washington County, Ark.

Reynolds, Mattie	Fayetteville, Washington County, Ark.
Robertson, F. O	Monticello, Drew County, Ark.
Routh, Louella	Boonsboro', Washington County, Ark.
Seaborn, J. M.	Forrest City, St. Francis County, Ark.
Shreve, A. W	Farmington, Washington County, Ark.
Shreve, H. B	Farmington, Washington County, Ark.
Southerland, H. R	Hindsville, Madison County, Ark.
Stuart, W. S	Columbus, Hempstead County, Ark.
Turner, F. P.	Charleston, Franklin County, Ark.
Vaughan, Cordie	Fayetteville, Washington County, Ark.
Walker, Nannie	Fayetteville, Washington County, Ark.
Webb, Abner	New Edinburg, Cleveland County, Ark.
Whitmore, J. T.	Center Point, Howard County, Ark.
Young, C. I	Fayetteville, Washington County, Ark.
Total	43.

PREPARATORY DEPARTMENT.

SUB-FRESHMAN CLASS.

Adams, O. C.	Alma, Crawford County, Ark.
Baum, Nettie	Fayetteville, Washington County, Ark.
Bellchambers, Annie	Eureka Springs, Carroll County, Ark.
Bond, Board	Newport, Jackson County, Ark.
Bray, W. O.	Fayetteville, Washington County, Ark.
Brewer, C. W.	Center Ridge, Conway County, Ark.
Bronaugh, Jerry	DeVall's Bluff, Pulaski County, Ark.
Bush, C. F	Van Buren, Crawford County, Ark.
Cassaday, H. V	Fayetteville, Washington County, Ark.
Comstock, R.	Uniontown, Crawford County, Ark.
Curry, Jennie	Fayetteville, Washington County, Ark.
Curry, Lula	Fayetteville, Washington County, Ark.
Curry, May	Fayetteville, Washington County, Ark.
Doak, J. A	Boonsboro', Washington County, Ark.
Drake, C. H	Fayetteville, Washington County, Ark.
Duke, Annie	Fayetteville, Washington County, Ark.
Field, S. L.	Eureka Springs, Crawford County, Ark.
Fike, W. T	Lanark, Bradley County, Ark.
Gallaway, Irene	Fayetteville, Washington County, Ark.
Galloway, D. F	Jacksonville, Pulaski County, Ark.
Goode, W. C	Magnolia, Columbia County, Ark.

Greene, F. W	Fayetteville, Washington County, Ark.
Gregg, H. L	Fayetteville, Washington County, Ark.
Hamilton, W. J	Hartford, Sebastian County, Ark.
Harrison, L. J	Fayetteville, Washington County, Ark.
Healy, Dan	Fayetteville, Washington County, Ark.
Henderson, F. K	Fayetteville, Washington County, Ark.
Hensley, W. B	Ozark, Franklin County, Ark.
Horton, S. A	Fairview, Dallas County, Ark.
Jackson, Edna	Fayetteville, Washington County, Ark.
Johnson, F.	Hot Springs, Garland County, Ark.
Johnson, G. B.	St. Louis, Mo.
Jones, Bertie	Fayetteville, Washington County, Ark.
Jones, J. W	Scotland, Van Buren County, Ark.
Kennedy, Alfred	Van Buren, Crawford County, Ark.
Kennedy, Allen	Van Buren, Crawford County, Ark.
Lacotts, J. A	DeWitt, Arkansas County, Ark.
Lee, O. C.	Alma, Crawford County, Ark.
Leverett, S.	Fayetteville, Washington County, Ark.
Lewis, Joe	Boonsboro', Washington County, Ark.
Murphy, E. L	Hot Springs, Garland County, Ark.
Newman, A. J.	Lonoke, Lonoke County, Ark.
Oliver, Wallace	Lee's Creek, Crawford County, Ark.
Overstreet, O. E	Eureka Springs, Carroll County, Ark.
Pace, Henry	Fayetteville, Washington County, Ark.
Parker, E. L	Pine Bluff, Jefferson County, Ark.
Parks, Fannie	Boonsboro', Washington County, Ark.
Quinney, W. R	Lanark, Bradley County, Ark.
Reed, Maud	Fayetteville, Washington County, Ark.
Reid, W. A	Morrilton, Conway County, Ark.
Reynolds, Farie	Fayetteville, Washington County, Ark.
Ross, J. C.	Malvern, Hot Spring County, Ark.
Rutherford, R. L	Billingsly, Washington County, Ark.
Saxon, E. F	Lisbon, Union County, Ark.
Sellers, Jordan	Perryville, Perry County, Ark.
Smith, M	El Dorado, Union County, Ark.
Stewart, W	Columbus, Hempstead County, Ark.
Switzer, D. M	Petersburg, Ashley County, Ark.
Treadwell, Evans	Toledo, Cleveland County, Ark.
Turner, J. L.	Cypert, Phillips County, Ark.
Walker, Lou	Fayetteville, Washington County, Ark.
Watson, Fannie	Boonsboro', Washington County, Ark.
Wilson, D. F.	Summerville, Calhoun County, Ark.
Wines, Loula	Fayetteville, Washington County, Ark.
Wingfield, J. D.	Antoine, Pike County, Ark.
Total	65

A CLASS.

Aiken, Gertie	Fayetteville, Washington County, Ark.
Atkins, Jno. H	Double Wells, Jefferson County, Ark.
Baldridge, J. R	Fayetteville, Washington County, Ark.
Blanton, C. L	Prairie Grove, Washington County, Ark.
Botefuhr, Fannie	Fayetteville, Washington County, Ark.
Byrnes, Dora	Fayetteville, Washington County, Ark.
Campbell, Edgar	Lowell, Benton County, Ark.
Carter, G. W	Carter's Store, Washington County, Ark.
Cassaday, G. H	Fayetteville, Washington County, Ark.
Clinkscales A. A	Van Buren, Crawford County, Ark.
Crawford, Della	Fayetteville, Washington County, Ark.
Davies, Elzie	Fayetteville, Washington County, Ark.
Davis, James	Auvergne, Jackson County, Ark.
Deaderick, J. D	Vanndale, Cross County, Ark.
Everett, J. W	Norwoodville, Sevier County, Ark.
Ferguson, A	Fayetteville, Washington County, Ark.
Green, T. C	Barton, Phillips County, Ark.
Gregg, Ida	Fayetteville, Washington County, Ark.
Hansard, C. O	Fayetteville, Washington County, Ark.
Harrison, Minnie	Billingsly, Washington County, Ark.
Hoag, E. C	Carthage, Jasper County, Mo.
Hoil, G. W	Marble, Madison County, Ark.
Hollis, Russell	Orlando, Cleveland County, Ark.
Horton, Maude	Fairview, Dallas County, Ark.
Hunt, Gertie	Fayetteville, Washington County, Ark.
Irvin, R. B	Fayetteville, Washington County, Ark.
Johnson, G. W	Fayetteville, Washington County, Ark.
Leach, D. C	Fayetteville, Washington County, Ark.
Lee, Frank	Fayetteville, Washington County, Ark.
Lee, Lillie	Fayetteville, Washington County, Ark.
Leverett, Ammie	Fayetteville, Washington County, Ark.
Lewis, L. L	Fayetteville, Washington County, Ark.
Logan, E	Walnut Hills, Lafayette County, Ark.
Lippard, J. L	Farmer, Scott County, Ark.
Macon, G. C	Cane Creek, Calhoun County, Ala.
McIlroy, Annie	Fayetteville, Washington County, Ark.
McIlroy, C. D	Fayetteville, Washington County, Ark.
McKibben, F	Van Buren, Crawford County, Ark.
McNeely, T. H	Rackensack, Pulaski County, Ark.
Middleton, Maude	Fayetteville, Washington County, Ark.
Mills, B. L	El Paso, White County, Ark.
Moore, D. W	Fayetteville, Washington County, Ark.
Nunn, J. B	Camden, Ouachita County, Ark.

O'Bryan, C. W.	Hot Springs, Garland County, Ark.
Overstreet, Carrie	Eureka Springs, Carroll County, Ark.
Owsley, C. R.	Charleston, Franklin County, Ark.
Pollard, Mary	Fayetteville, Washington County, Ark.
Pounds, W. M.	Jonesboro', Craighead County, Ark.
Probst, C. J	Little Rock, Pulaski County, Ark.
Rankin, Lillie	Russellville, Pope County, Ark.
Rankin, Nannie	Russellville, Pope County, Ark.
Reinhardt, Hattie	Alma, Crawford County, Ark.
Shaver, S. L.	Grange, Sharp County, Ark.
Shipley, N. P.	Chester, Crawford County, Ark.
Simmons, J. W	Tillar Station, Drew County, Ark.
Smith, S. K.	Fayetteville, Washington County, Ark.
Stuart, R. B.	Columbus, Hempstead County, Ark.
Taff, S. M	Waldron, Scott County, Ark.
Turner, T. L.	Ash Flat, Sharp County, Ark.
Vaulx, S. F.	Fayetteville, Washington County, Ark.
Wade, M. C.	Fayetteville, Washington County, Ark.
Wade, R. L.	Van Buren, Crawford County, Ark.
Walkup, W. H.	Clarendon, Monroe County, Ark.
Watson, J. E	Charleston, Franklin County, Ark.
Wills, J. F.	Hartford, Sebastian County, Ark.
Winn, C. M.	Russellville, Pope County, Ark.
Woodward, B. B.	Sub Rosa, Franklin County, Ark.
Total	67.

B CLASS.

Baker, Mollie	Mountain View, Stone County, Ark.
Baxter, Bitha	Forks, Cook County, Wyoming Ter.
Boone, D. A	Swagerty, Washington County, Ark.
Buckner, Jennie	Fayetteville, Washington County, Ark.
Butt, Ellie	Ft. Smith, Sebastian County, Ark.
Campbell, Effie	Fayetteville, Washington County, Ark.
Compton, C. M	Fayetteville, Washington County, Ark.
Derby, Earl H	Hot Springs, Garland County, Ark.
Dowell, R. W.	Fayetteville, Washington County, Ark.
Edgar, Geo. T	Fayetteville, Washington County, Ark.
Evans, Ella	Fayetteville, Washington County, Ark.
Evins, A. W	Boonsboro', Washington County, Ark.
Faulkner, C. E.	Helena, Phillips County, Ark.
Foster, J. W.	Hartford, Sebastian County, Ark.
Galloway, Jennie	Jacksonville, Pulaski County, Ark.
Galloway, Maggie	Jacksonville, Pulaski County, Ark.
Halk, J. W	Cherry Valley, Cross County, Ark.

Harkrider, C. E	El Paso, White County, Ark.
Harris, R. C	Fayetteville, Washington County, Ark.
Hocott, J. J	Riverside, Woodruff County, Ark.
Holway, Lutie	Fayetteville, Washington County, Ark.
Howe, E. J	Black Rock, Lawrence Contuy, Ark.
Howell, Willey	Fayetteville, Washington County, Ark.
Hulse, M. L	Fayetteville, Washington County, Ark.
Jackman, J. S	New Gascony, Jefferson County, Ark.
Jackson, Hugh	Fayetteville, Washington County, Ark.
Jelks, John L	Riverside, Woodruff County, Ark.
Jelks, W. E	Searcy, White County, Ark.
Jennings, J. E	Eureka Springs, Carroll County, Ark.
Johnson, Lydia	Fayetteville, Washington County, Ark.
Kellogg, W. S	Little Rock, Pulaski County, Ark.
Long, Annie	Fayetteville, Washington County, Ark.
Malone, J. E	Hackett City, Sebastian County, Ark.
McNair, W. D	Pierce City, Lawrence County, Mo.
Murrell, Walter	Austin, Lonoke County, Ark.
Oettinger, Joe	Malvern, Hot Spring County, Ark.
Pounds, W. A	Jonesboro', Craighead County, Ark.
Rankin, Fannie	Russellville, Pope County, Ark.
Rhea, Sallie	Rhea's Mills, Washington County, Ark.
Shoffner, C. L	Auvergne, Jackson County, Ark.
Shreve, H. W	Farmington, Washington County, Ark.
Simmons, Ella	Fayetteville, Washington County, Ark.
Smith, F. G	Marion, Crittenden County, Ark.
Smith, W. S	Marion, Crittenden County, Ark.
Speir, T. U	Uniontown, Crawford County, Ark.
Wade, Eddie	Fayetteville, Washington County, Ark.
Walters, D. B	Scottsville, Pope County, Ark.
Ward, W. J	Fayetteville, Washington County, Ark.
Warren, J. T	El Paso, White County, Ark.
West, J. B	Boonsboro', Washington County, Ark.
White, Lula	Fayetteville, Washington County, Ark.
Wilkins, J. L	Helena, Phillips County, Ark.
Wilson, Lizzie	Fayetteville, Washington County, Ark.
Yarbrough, W. P	Augusta, Woodruff County, Ark.
Total	54

C CLASS.

Baylor, Della	Fayetteville, Washington County, Ark.
Booker, W. B	Columbus, Hempstead County, Ark.
Culver, Nannie	Fayetteville, Washington County, Ark.
Davis, Isidore	Hot Springs, Garland County, Ark.

Deaderick, I. N	Vanndale, Cross County, Ark.
Dent, H. G	Imboden, Lawrence County, Ark.
Dodds, J. B	Pine Bluff, Jefferson County, Ark.
Douglass, W. W	Fayetteville, Washington County, Ark.
Fisher, Gertie	Fayetteville, Washington County, Ark.
Gleghorn, W. A	Riverside, Woodruff County, Ark.
Graves, A. W	Lexa, Phillips County, Ark.
Hammack, A	Van Buren, Crawford County, Ark.
Hess, G. R	Mountian View, Stone County, Ark.
Hoge, H. M	Fayetteville, Washington County, Ark.
Hooper, G. N	Little Rock, Pulaski County, Ark.
Huston, C. E	Walnut Ridge, Lawrence County, Ark.
Katz, Leon	Casco, Arkansas County, Ark.
Killough, Wesley	Vanndale, Cross County, Ark.
Kinman, T. D	Newport, Jackson County, Ark.
Ladd, J. F	Wheeler, Washington County, Ark.
Lee, Eva	Fayetteville, Washington County, Ark.
Macon, J. W	Hayes' Store, Madison County, Ala.
Montgomery, J. J	Spadra, Johnson County, Ark.
Phillips, W. H	Ash Flat, Sharp County, Ark.
Turner, J. H	Ash Flat, Sharp County, Ark.
Wolf, Cyrus	Little Rock, Pulaski County, Ark.
Total	26.

IRREGULAR.

Harrison, J. C	Fayetteville, Washington County, Ark.

RECAPITULATION.

	MALES.	FEMALES.	TOTAL.
Junior Class	13	2	15
Sophomore Class	14	5	19
Freshman Class	34	9	43
	—	—	—
Total	61	16	77
Sub-Freshman Class	49	16	65
A Class	49	18	67
B Class	37	17	54
C Class	22	4	26
Irregular	1	—	1
	—	—	—
Total	219	71	290
Matriculates that were not admitted into the classes they applied for and returned home			11
Total number of matriculates			—301
Students in Instrumental Music			36
Students in Vocal Music			14
Students in Art			280
Total			—621
Deduct names repeated in Music and Art			294
Total in Departments at Fayetteville			—327
Medical Department at Little Rock			61
Branch Normal at Pine Bluff			215
Grand total			—603

GENERAL INFORMATION.

The aims of the University are set forth in the following sections of the Acts of Congress and of the General Assembly of Arkansas, under which it was established:

The Act of Congress of 1862, appropriating lands to establish colleges in the States, provides that all moneys derived from their sale "shall be inviolably appropriated by each State which may take and claim the benefit of this act, to the endowment, support and maintenance of at least one college, where the leading objects shall be, without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts in such manner as the Legislatures of the States may respectively prescribe, in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions of life."

(U. S. Statutes, Vol. 61, Stat. 7, Sec. 4).

Our own General Assembly, in accepting the original grant and in creating the University, provides that the fund realized therefrom, "shall be forever devoted and applied to the endowment and maintenance, under such laws or articles of incorporation as may be by the General Assembly hereafter provided, of an institution of learning to be styled 'The Arkansas Industrial University,' wherein shall be taught, in addition to the usual course of study prescribed in universities, the science and practice of Agriculture, the Mechanic Arts, Engineering and Military Science and Tactics." Act of July 23, 1868.)

In order further to emphasize the Agricultural and Mechanical Departments, the late Legislature, in what is known as the Barker Bill, while making a handsome appropriation to each of these leading Departments, ordained that all male beneficiaries should pursue one of these courses; restricted the subjects to be taught to beneficiaries; and fixed the number and character of the professorships. The evident design of the Legislature was to respond to the demands and needs of the State, by creating an Agricultural and Mechanical Institution, with such subsidiary courses as the amount of the appropriation would allow. The present Board of Trustees and Faculty of the Institution, aware of the necessities of the State and fully in accord with the policy outlined by the Legislature, have done all in their power, in laying out the appropriation and drawing up the courses of study, to meet the wants, both of the great mass of the State, as well as of the minority also in a subsidiary way. We are fully persuaded that the Agricultural and Mechanical courses here offered and the facilities afforded by the Legislative appropriations will enable us to turn out graduates in these Departments that will compare favorably with those of any other school, while at the same time, with little or no additional cost to the State, strong Classical and Normal courses have been laid down. We engage to turn out B. A. and L. I. graduates, strong, healthy, vigorous, and at the same time furnished with far more than the average knowledge. training and experience found in graduates of this character from other schools.

The Courses offered are the following:

1.	Agricultural, leading to the Degree of B. S. A.	See Schedule p. 21	Detailed Statement p. 42
2.	General Science, leading to the Degree of B. S	“ “ “ 22	“ “ “ 46
3.	Short Agricultural, ending with Soph. year ...	“ “ “ 23	“ “ “ 42
4.	Mechanical Engineering, leading to the Degree of B. M. E.	“ “ “ 24	“ “ “ 59
5.	Civil Engineering, leading to the Degree of B. C. E.	“ “ “ 25	“ “ “ 60
6.	Mechanic Arts, ending with the Soph. year....	“ “ “ 26	“ “ “ 48
7.	Young Ladies' Course, Degree B. S or B Let.	“ “ “ 27	“ “ “ 19
8.	Classical Course, leading to the Degree of B. A.	“ “ “ 28	“ “ “ 18
9.	Normal Course, leading to the Degree of L. I.	“ “ “ 29	“ “ “ 74

Courses 1, 2, 3, 4, 5, 6, 7 are free to all Beneficiaries, but if any language other than English is taken, the regular tuition fee will be exacted.

Courses 8 and 9 can be taken only by the payment of the regular tuition fee of ten dollars per year.

All Courses *for male students* are required to include practical work at from three cents to five cents per hour. The hours of the day are, therefore, divided into two parts; the morning hours are devoted to recitations in the various courses; three hours of the afternoon are devoted to the various kinds of practical work. The schedule of courses from p. 21 to p. 29 includes only the five periods into which the hours from 9 a. m. to 12:20 p. m. are divided. For afternoon work all male students are referred to p. 30 and following, where the full schedule of afternoon work is given.

Arrangements have been made so that a student in any course *may*, by application to the Faculty and at the discretion of that body, take, as a fifth study, French in the Freshman and Sophomore years, and German in the Junior and Senior years; and where possible, as stated in schedule, p. 21 to p. 29, the student has been allowed to use his own discretion in choosing the language indicated or the study with which it is made elective; but in all cases, Beneficiaries, when they take any language other than English, must pay the regular tuition fee of ten dollars per year.

The Classical course is intended to meet the wants of those who, while strong and steady enough to do the practical work required, have the energy and will-power to do the mental work of a B. A. course, and obtain that degree as a basis for professional life, or for mental training; of those who have State pride enough not to want to go outside of the State to obtain that training which the State *ought to*, *can*, and *does* afford its sons. The very best material of the State, thus dissociated from all its interests and belongings during the whole period of training, is either permanently lost to the State, or comes back to work at an immense disadvantage for want of knowledge of those of whom under other circumstances there would have existed the truest of all knowledge, the intimate association of school life. We call upon the patriotism of the State to stop this annual emigration, and are glad to be able, on our own part, to offer a B. A. course equal to that of any other institution.

The Young Ladies' course is a necessity, since the Barker Bill still admits ladies as beneficiaries, yet does not require any work of them. At the same time, they could not take the specific text-book work required in the first seven courses. The course is so arranged that by taking the science work as laid down, the lady beneficiaries do not pay tuition, and obtain the degree of B. S. By paying tuition and substituting a language for some of the sciences as indicated by the necessities of the schedule, they can obtain the degree of B. Let.; or they can take the regular B. A. course. *The manual work required of young ladies by the Board is only such as they did last year under Miss Hall.*

By a resolution of the Board of Trustees, every parent or guardian is required to choose for his son or ward, if a minor, either the Mechanical or Agricultural course of labor, and to make a written communication to the President at the entrance of the student stating the choice made.

CONDITIONS FOR ADMISSION TO FRESHMAN CLASS.

All new students seeking to enter the Freshman Class will be examined in Geography, U. S. History, English Grammar (Analysis and Composition), Arithmetic, Algebra (to Quadratic Equations), Geometry (three books) and Latin, if the course of study embraces Latin.

Candidates for higher classes, or for the Freshman Class after beginning of session, will be examined also in the subjects passed over by the class.

PREPARATORY DEPARTMENT.

The A Class and the Sub-Freshman Class constitute the Preparatory Department, and, as will be seen by reference to the schedule, p. 21 to p. 29, are substantially the same for all courses. The B Class will consist of those that fall below the requirements for the A Class in any study, and it will be used to coach up students so failing. The student will remain in it only so long as is necessary to prepare him for the upper Class. In order that this coaching work may the more readily and rapidly be done, the Board of Trustees, not regarding the students of this Class as regular members of the University, have remitted the labor required in their case.

Agricultural Course for Bachelor of Scientific Agriculture (*B. S. A.*)

CLASSES.	HOURS.	FIRST TERM.	SECOND TERM.	THIRD TERM.
A CLASS.	1	English Grammar	English Grammar	English Grammar
	2	Arithmetic	Arithmetic	Arithmetic
	3	Geography	United States History	United States History
	4	Reading and Spelling	Reading and Spelling	Reading and Spelling
SUB-FRESH. CLASS.	1			Book-Keeping
	2	Elementary Chemistry (3) Elocution (2)	Elementary Physiol. (3) Elocution (2)	
	3	Geometry	Algebra	Algebra
	4	Physical Geography	Phys. Geog. and B'k-Kpg.	Elementary Botany (3) Elocution (2)
	5	English	English	English
FRESHMAN CLASS.	1	Algebra	Algebra and Geometry	Geometry
	2	English	English	English
	3	Physiology		
	4	Physics	Physics	Science of Agriculture
	5		Zoology	Botany
		(Elocution one rec. per wk.)	(Elocution one rec. per wk.)	(Elocution one rec. per wk.)
SOPHOMORE CLASS.	1	General History	General History	General History
	2	Struct'l and Micros. Botany	Biology and Entomology	Feeding and Dairy Husbd'y
	3	General Chemistry	General Chemistry	General Chemistry
	5	Geometry	Plane Trigonometry	Spherical Trigonometry
		(Elocution one rec. per wk.)		(Elocution one rec. per wk.)
JUNIOR CLASS.	1	Mineralogy	Geology	Geology
	2	Analytical Geometry	Analyt'l Geom. and Calculus (elective with Ger.)	Calculus (elective with Ger.)
	3	English (opt. with German)	Science of Agriculture	Botany and Scientific Hort.
	4	Analytical Chemistry	Analytical Chemistry	Analytical Chemistry
	5	German (opt. with English)	German (elect. with Calcu.)	German (elect. with Calcu.)
SENIOR CLASS.	1	Meteorology	Stock-Breed., Embryology and Veterinary Science	Scientific Agriculture
	2	Analytical Chemistry	Industrial Chemistry	Agricultural Chemistry
	3	Astronomy		
	4		Surveying	Surveying (opt. with Ger.)
	4	German (optional) or	German (optional) or	German (opt. with Surv'g)
	5	Psychology	Psychology and Ethics	Political Economy

(Course of Lectures one hour per week, through Senior year, on Origin of Language and History.)

General Science Course for Bachelor of Science (*B. S.*).

CLASSES.	HOURS.	FIRST TERM.	SECOND TERM.	THIRD TERM.
A CLASS.		Same as Agricultr'l Course.	Same as Agricultr'l Course.	Same as Agricultr'l Course.
SUB-FRESH. CLASS.		Same as Agricultr'l Course.	Same as Agricultr'l Course.	Same as Agricultr'l Course.
FRESHMAN CLASS.		Same as Agricultr'l Course.	Same as Agricultr'l Course.	Same as Agricultr'l Course.
SOPHOMORE CLASS		Same as Agricultr'l Course.	Same as Agricultr'l Course.	Same as Agricultr'l Course.
JUNIOR CLASS.	1	Mineralogy................	Geology....................	Geology. ....
	2	Analytical Geometry.......	Anal. Geom. and Calculus or German................	Calculus or German.........
	3	English or German.........	English....................	Botany and Sci. Horticulture
	4	Anal. Chemistry, Qual.....	Anal. Chemistry, Qual.....	Anal. Chemistry, Quant.....
SENIOR CLASS.	1	Zoology...................	Zoology....................	Assaying, Mining and Metallurgy................
	2	Analyt. Chemistry, Quant..	Industrial Chemistry.......	Agric. Chemical Analysis...
	8	Astronomy.................	Thermo-Dynamics	Electricity................
	4	....	Surveying.................	....
	4	....	German or.................	....
	5	Psychology or German....	Psychology and Ethics.....	Pol. Economy or German...

Short Agricultural Course.

CLASSES.	HOURS.	FIRST TERM.	SECOND TERM.	THIRD TERM.
A CLASS.		Same as Long Agricultural Course.	Same as Long Agricultural Course.	Same as Long Agricultural Course.
SUB-FRESH. CLASS.		Same as Long Agricultural Course.	Same as Long Agricultural Course.	Same as Long Agricultural Course.
FRESH. CLASS.		Same as Long Agricultural Course.	Same as Long Agricultural Course.	Same as Long Agricultural Course.
SOPHOMORE CLASS.	1	General History...........	General History..........	Scientific Agriculture......
	2	Struct'l and Micros. Botany	Biol'gy, Entomology, Stock Breeding, Vet. Science...	Feeding and Dairy Husbd'y
	3	General Chemistry.........	General Chemistry.........	Botany and Scientific Hort.
	4	....	....	....
	5	Geometry..................	Plane Trigonometry........	Political Economy.........

Mechanical Engineering Course for Bachelor of Mechanical Engineering (B.M.E.).

CLASSES.	HOURS.	FIRST TERM.	SECOND TERM.	THIRD TERM.
A CLASS.	1	English.	English.	English.
	2	Arithmetic.	Arithmetic.	Arithmetic.
	3	Geography.	U. S. History.	U. S History.
	4	Reading and Spelling.	Reading and Spelling.	Reading and Spelling.
SUB-FRESH. CLASS.	1	Elementary Zoology (3) Elocution (2).		Book-Keeping
	2		Elementary Physiology (3). Elocution (2).	
	3	Geometry.	Algebra.	Algebra.
	4	Physical Geography.	Physical Geography and Book-Keeping	Elementary Botany (3). Elocution (2).
	5	English.	English.	English.
FRESHMAN CLASS	1	Algebra.	Algebra and Geometry.	Geometry
	2	English.	English.	English.
	4	Physics.	Physics.	Physics.
	5	Shop-work Appliances.	Roads, Streets and Pavements.	Descriptive Geometry.
SOPHOMORE CLASS.	1	General History.	General History.	
	2	Heat.		Elements of Mechanism.
	3	General Chemistry.	General Chemistry.	General Chemistry.
	4		Surveying.	Surveying.
	5	Geometry.	Plane Trigonometry	Spherical Trigonometry.
JUNIOR CLASS.	1	Machinery and Mill-work.	Machinery and Mill-work.	Steam Engineering
	2	Analytical Geometry.	Analytical Geometry and Calculus.	Calculus.
	3	Sanitary Engineering.	Steam Engineering	Elements of Mechanics.
	4	Analytical Chemistry.	Analytical Chemistry.	Analytical Chemistry.
	5	German (Elective).	German (Elective.)	German (Elective).
SENIOR CLASS.	1	Applied Mechanics.	Applied Mechanics.	
	2	Friction and Lubrication (optional with German).	Method of Least Squares, (optional with German).	Hydraulic Engineering.
	3	Astronomy.	Lectures on Designing.	Electricity.
	4	German (optional with Friction and Lubrication).	German (optional with Method of Least Squares).	Specifications, Contracts and Estimates.
	5	Mechanical Engineering.	Mechanical Engineering.	Mechanical Engineering.

Civil Engineering Course for Bachelor of Civil Engineering (B. C. E.).

CLASSES	HOURS.	FIRST TERM.	SECOND TERM.	THIRD TERM.
A CLASS.		Same as Mechanical Engineering Course.	Same as Mechanical Engineering Course.	Same as Mechanical Engineering Course.
SUB-FRESH. CLASS.		Same as Mechanical Engineering Course.	Same as Mechanical Engineering Course.	Same as Mechanical Engineering Course.
FRESHMAN CHASS.		Same as Mechanical Engineering Course.	Same as Mechanical Engineering Course.	Same as Mechanical Engineering Course.
SOPHOMORE CLASS.		Same as Mechanical Engineering Course.	Same as Mechanical Engineering Course.	Same as Mechanical Engineering Course.
JUNIOR CLASS.	1	Road Engineering	Geology	Geology
	2	Analytical Geometry	Analytical Geometry and Calculus.	Calculus
	3	Sanitary Engineering	Road Engineering	Elements of Mechanics
	4	Analytical Chemistry	Analytical Chemistry	Analytical Chemistry
	5	German (Elective)	German (Elective)	German (Elective)
SENIOR CLASS.	1	Applied Mechanics	Applied Mechanics	
	2	Steam Engineering (Optional with German)	Method of Least Sqnares (Optional with German)	Hydraulic Engineering
	3	Astronomy	Lectures on Designing	Electricity
	4	German (Optional with Steam Engineering)	German (Optional with Method of Least Squares)	Specifications, Contracts, and Estimates
	5	Civil Engineering	Civil Engineering	Civil Engineering

Mechanic Arts Course.

CLASSES.	HOURS.	FIRST TERM.	SECOND TERM.	THIRD TERM.
A CLASS.		Same as Mechanical Engineering Course.	Same as Mechanical Engineering Course.	Same as Mechanical Engineering Course.
SUB-FRESH. CLASS.		Same as Mechanical Engineering Course.	Same as Mechanical Engineering Course.	Same as Mechanical Engineering Course.
FRESHMAN CLASS.		Same as Mechanical Engineering Course.	Same as Mechanical Engineering Course.	Same as Mechanical Engineering Course.
SOPHOMORE CLASS.	1	General History	General History	Steam Engineering
	2	Steam Engineering	Steam Engineering	Elements of Mechanism
	3	General Chemistry	General Chemistry	Elements of Mechanics
	4			
	5	Geometry	Plane Trigonometry	Spherical Trigonometry

Young Ladies' Course for Bachelor of Science (*B. S.*).

Classes.	Hours.	First Term.	Second Term.	Third Term.
Freshman Class.	1	Algebra	Algebra and Geometry	Geometry
	2	English	English	English
	3	Physiology		
	4	Physics	Physics	Physics
	5		Zoology	Botany
Sophomore Class.	1	General History	General History	General History
	2	Heat	Biology (Entomology)	Dairy Husbandry
	3	General Chemistry	General Chemistry	General Chemistry
	4			
	5	Geometry	Plane Trigonometry	Spherical Trigonometry
Junior Class.	1	Mineralogy	Geology	Geology
	2	Analytical Geometry	Analytical Geometry	
	3	English Literature	English Literature	English Literature
	4	Analytical Chemistry	Analytical Chemistry	Analytical Chemistry
	5			Political Economy
Senior Class.	1	Zoology		
	2	Anglo-Saxon	Anglo-Saxon	English Philology
	3	Astronomy	History of Education	Electricity
	4		Surveying	Logic
	5	Psychology	Psychology and Ethics	Ethics

NOTE—The Studies in the Preparatory Classes of this Course are the same as those of corresponding classes in the Classical Course except Latin.

Young ladies may take French (omitting Physiology) in Freshman and Sophomore Classes, and German in Junior and Senior Classes; or they may substitute Latin for one of the prescribed studies throughout the course. In either case, they will be entitled to the degree of Bachelor of Letters (B. Let.).

Classical Course for Bachelor of Arts (B. A.).

CLASSES.	HOURS.	FIRST TERM.	SECOND TERM.	THIRD TERM.
A CLASS.	1	Eng. Grammar and Comp'n.	Eng. Grammar and Comp'n.	Eng. Grammar and Comp'n.
	2	Arithmetic	Arithmetic	Arithmetic
	3	Geography (optional)	United States History	United States History (opt'l)
	4	Reading and Spelling	Reading and Spelling (opt'l)	Reading and Spelling
	5	Latin { Gildersleeve's Gram. Jones' First Less'ns.	Latin Grammar and Less'ns	Latin Grammar and Lessons
SUB-FRESH CLASS.	1	El Zoology 3. Elocution 2	{ El. Physiology 3. Elocution 2	Book-Keeping (optional)
	2	Latin { Grammar, Composition and Reader	Latin, Cæsar or Curtius	Latin, Cæsar or Curtius
	3	Geometry	Algebra	Algebra
	4	Physical Geography (opt'l)	Physics and Bk-Kpg (opt'l)	El. Botany 3. Elocution 2
	5	Eng. Analysis and Comp'n	Eng Analysis and Comp'n	Eng Analysis and Comp'n
FRESHMAN CLASS.	1	Algebra	Algebra and Geometry	Geometry
	2	English (optional)	English	English
	3	Greek or French	Greek or French	Greek or French
	4	Physics	Physics (optional)	Elementary Botany (opt'l)
	5	Latin	Latin	Latin
SOPHOMORE CLASS.	1	General History (optional)	General History (optional)	General History
	2	Latin	Latin	Latin
	3	General Chemistry	General Chemistry	General Chemistry
	4	Greek or French	Greek or French	Greek or French
	5	Geometry	Plane Trigonometry	Spher. Trigonometry (opt'l)
JUNIOR CLASS.	1	Mineralogy (optional)	Geology	Latin
	2	Analytical Geometry	{ Analytical Geometry and Calculus (optional)	Calculus (optional)
	3	English Literature	English Literature	English Literature
	4	Latin	Latin	Logic
	5	Greek or German	Greek or German	Greek or German
SENIOR CLASS.	1	Latin	Latin (optional)	Latin
	2	Anglo-Saxon	Anglo-Saxon	English Philology
	3	Greek—Astronomy (opt'l)	Greek	Greek or
	4	or German	or German—Surveying	German
	5	Psychology	Psychology and Ethics	Ethics and Political Econ'y.

Normal Course for Licentiate of Instruction (*L. I.*).

Classes.	Hours	First Term.	Second Term.	Third Term.
A Class.	1	English Grammor and Composition	English Grammar and Composition	English Grammar and Composition
	2	Arithmetic	Arithmetic	Arithmetic
	3	Geography	U. S. History	U. S. History
	4	Reading and Spelling	Reading and Spelling	Reading and Spelling
	5	Latin (elective)	Latin (elective)	Latin (elective)
Sub-Freshman Class.	1	Pedagogics 2, Zoology 3	Latin or Elem. Physiology	Pedagogics 3, Book-Keeping 2, (elective)
	2	Latin or Elem. Chemistry	Pedagogics	Latin
	3	Geometry	Algebra	Algebra
	4	Phys. Geography (elective)	Physical Geography and Book-Keeping (elective).	Elementary Botany
	5	Eng. Analysis and Composition	English Analysis and Composition	English Analysis and Composition
Freshman Class.	1	Algebra	Algebra and Geometry	Geometry
	2	English (elective)	English	English
	3	Physiology	History of Education	School Management
	4	Physics	Physics (elective)	Botany (elective)
	5	Latin	Latin	Latin
Sophomore Class.	1	General History (elective)	General History (elective).	General History
	2	Latin	Latin	Latin
	3	General Chemistry	General Chemistry	Psychology
	4	Philosophy of Education	Surveying	Const and School Law
	5	Geometry	Plane Trigonometry	Ethics (elective)

Note—A post-graduate course embracing the work of the last two years of the Young Ladies' Course, General Science Course or B. A. Course will entitle the student to the degree of Bachelor of Letters, Bachelor of Science, or Bachelor of Arts respectively.

In all courses of study, original orations and essays will be periodically required of the Senior and Junior classes, and elocutionary exercises of the Sophomore and Freshman classes.

Schedule for Practical Exercises—Afternoon Work.

Class.	Day.	AGRICULTURAL COURSE. First Term.	AGRICULTURAL COURSE. Second Term	AGRICULTURAL COURSE. Third Term.	SHORT AGRICULTURAL COURSE. First Term	SHORT AGRICULTURAL COURSE. Second Term	SHORT AGRICULTURAL COURSE. Third Term
A Class.	Monday	Shop	Draw and drill	Shop	Shop	Draw and drill	Shop
	Tuesday	Draw and drill	Shop	Draw and drill	Draw and drill	Shop	Draw and drill.
	Wednesday	Farm	Draw and drill	Farm	Farm	Draw and drill	Farm.
	Thursday	Draw and drill	Farm	Draw and drill	Draw and drill	Farm	Draw and drill.
	Friday	Farm		Farm	Farm		Farm.
	Saturday		Farm			Farm	
Sub-Fresh.	Monday	Draw and drill.	Farm	Draw and drill	Draw and drill	Farm	Draw and drill.
	Tuesday	Farm	Draw and drill	Farm	Farm	Draw aud drill	Farm
	Wednesday	Draw and drill	Farm	Draw and drill	Draw and drill	Farm	Draw and drill.
	Thursday	Farm	Draw and drill	Farm	Farm	Draw and drill	Farm
	Friday		Shop			Shop	
	Saturday	Shop		Shop	Shop		Shop.
Fresh.	Monday	Farm	Draw and drill	Farm	Farm	Draw and drill	Farm.
	Tuesday	Draw and drill	Farm	Draw and drill	Draw and drill	Farm	Draw and drill.
	Wednesday	Farm	Draw and drill	Biol. lab'y	Farm	Draw and drill	Biol. lab'y.
	Thursday	Draw and drill	Biol. lab'y	Draw and drill	Draw and drill	Biol. lab'y	Draw and drill.
	Friday	Shop		Shop	Shop		Shop.
	Saturday		Shop			Shop	
Sopho.	Monday	Draw and drill.	Farm	Draw and drill	Draw and drill	Farm	Draw and drill.
	Tuesday	Farm	Draw and drill	Farm	Farm	Draw and drill	Farm.
	Wednesday	Draw and drill	Shop	Draw and drill	Draw and drill		Draw and drill.
	Thursday	Shop	Draw and drill	Shop	Farm	Draw and drill	
	Friday	Biol. lab'y	Biol. lab'y		Biol. lab'y	Biol lab'y	Survey.
	Saturday			Chem. lab'y		Survey	Chem. lab'y.

NOTE—Chemical Laboratory—Chem. lab'y; Biological Laboratory—Biol. lab'y; Physical Laboratory—Phys. lab'y; Geological Survey—Geol. survey; Draw—Drawing.

Schedule for Practical Exercises—Afternoon Work—Continued.

Class.	Day.	AGRICULTURAL COURSE.			SHORT AGRICULTURAL COURSE.		
		First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.
Junior.	Monday	Farm	Farm and drill	Farm			
	Tuesday	Farm and drill	Farm	Farm and drill			
	Wednesday	Farm	Farm and drill				
	Thursday	Chem. lab'y and drill.		Chem. lab'y and drill.			
	Friday	Chem. lab'y	Chem. lab'y	Chem. lab'y			
	Saturday		Geol. Survey	Geol. Survey			
Senior.	Monday	Drill and farm	Farm	Farm and drill			
	Tuesday	Farm	Farm and drill	Chem. lab'y			
	Wednesday	Chem. lab'y and drill		Chem. lab'y and drill.			
	Thursday	Chem. lab'y	Chem. lab'y and drill.				
	Friday		Chem. lab'y	Survey			
	Saturday	Farm	Survey	Farm			

NOTE—Chemical Laboratory—Chem. lab'y; Biological Laboratory—Biol. lab'y; Physical Laboratory—Phys. lab'y; Geological Survey—Geol survey; Draw—Drawing.

Schedule for Practical Exercises—Afternoon Work—Continued.

Class.	Day.	SCIENTIFIC COURSE.			CIVIL ENGINEERING COURSE.		
		First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.
A Class	Monday	Farm or shop	Draw and drill.	Farm or shop	Draw and drill.	Shop.	Draw and drill.
	Tuesday	Draw and drill.	Farm or shop	Draw and drill.	Shop.	Draw and drill.	Shop.
	Wednesday	Farm or shop	Draw and drill.	Farm or shop	Draw and drill.	Shop.	Draw and drill.
	Thursday	Draw and drill.	Farm or shop	Draw and drill.	Shop.	Draw and drill.	Shop.
	Friday	Farm or shop		Farm or shop		Shop	
	Saturday		Farm or shop		Shop.		Shop.
Sub-Fresh.	Monday	Draw and drill	Farm or shop	Draw and drill.	Shop.	Draw and drill	Shop.
	Tuesday	Farm or shop	Draw and drill.	Farm or shop	Draw and drill.	Shop.	Draw and drill.
	Wednesday	Draw and drill.	Farm or shop	Draw and drill.	Shop	Draw and drill	Shop.
	Thursday	Farm or shop	Draw and drill	Farm or shop	Draw and drill.	Shop	Draw and drill.
	Friday		Farm or shop		Shop.		Shop.
	Saturday	Farm or shop		Farm or shop		Shop.	
Fresh.	Monday	Farm or shop	Draw and drill.	Farm or shop	Draw and drill.	Shop.	Draw and drill.
	Tuesday	Draw and drill.	Farm or shop	Draw and drill.	Shop.	Draw and drill	Shop.
	Wednesday	Farm or shop	Draw and drill.	Biol. lab'y	Draw and drill.	Shop.	Draw and drill.
	Thursday	Draw and drill	Biol. lab'y	Draw and drill.	Shop.	Draw and drill.	Shop.
	Friday	Farm or shop		Farm or shop		Shop.	
	Saturday		Farm or shop		Shop.		Shop.
Sopho.	Monday	Draw and drill	Farm or shop	Draw and drill	Shop.	Draw and drill.	
	Tuesday	Farm or shop	Draw and drill.	Farm or shop	Draw and drill.	Shop.	Draw and drill.
	Wednesday	Draw and drill	Farm or shop	Draw and drill.	Shop	Draw and drill.	Survey.
	Thursday	Shop or farm	Draw and drill.	Shop or farm.	Draw and drill.	Shop.	Draw and drill.
	Friday	Biol. lab'y.	Biol. lab'y				Survey.
	Saturday			Chem. lab'y.	Phys. lab'y.	Survey.	Chem. lab'y.

Note—Chemical Laboratory—Chem. lab'y; Biological Laboratory—Biol. lab'y; Physical Laboratory—Phys. lab'y; Geological Survey—Geol. survey; Draw—Drawing.

Schedule for Practical Exercises—Afternoon Work—Continued.

Class.	Day	SCIENTIFIC COURSE.			CIVIL ENGINEERING COURSE.		
		First Term	Second Term.	Third Term.	First Term.	Second Term.	Third Term.
Junior.	Monday	Farm or shop	Draw and drill	Biol. lab'y	Draw and drill.	Survey.	Draw and drill.
	Tuesday	Draw and drill.	Farm or shop	Draw and drill	Survey.	Draw and drill.	Survey.
	Wednesday	Farm or shop	Draw and drill.		Draw and drill		Draw and drill.
	Thursday	Chem. lab'y and drill		Chem. lab'y and drill.	Shop	Draw and drill	
	Friday	Chem. lab'y	Chem lab'y	Chem. lab'y	Chem. lab'y	Chem. lab'y	Chem. lab'y.
	Saturday		Geol. survey	Geol. survey.		Geol. survey	Geol. survey.
Senior.	Monday	Shop or farm and drill		Shop or farm and drill	Shop	Draw and drill.	Survey.
	Tuesday	Biol. lab'y.	Shop or farm and drill	Chem. lab'y	Draw and drill	Shop	Draw and drill
	Wednesday	Shop or farm and drill	Biol. lab'y	Chem. lab'y and drill.	Chem. lab'y	Draw and drill	Chem. lab'y.
	Thursday	Chem. lab'y	Chem. lab'y and drill.		Draw and drill	Chem. lab'y	Draw and drill.
	Friday		Chem. lab'y	Phys. lab'y	Survey		Phys. lab'y.
	Saturday	Farm or shop	Survey	Farm or shop		Survey	

NOTE—Chemical Laboratory—Chem. lab'y; Biological Laboratory—Biol. lab'y; Physical Laboratory—Phys. lab'y; Geological Survey—Geol. survey; Draw—Drawing.

Schedule for Practical Exercises—Afternoon Work—Continued.

Class.	Day.	MECHANICAL ENGINEERING COURSE.			MECHANIC ARTS COURSE.		
		First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.
A Class.	Monday	Draw and drill	Shop	Draw and drill	Draw and drill	Shop	Draw and drill.
	Tuesday	Shop	Draw and drill	Shop	Shop	Draw and drill	Shop.
	Wednesday	Draw and drill	Shop	Draw and drill	Draw and drill	Shop	Draw and drill.
	Thursday	Shop	Draw and drill	Shop	Shop	Draw and drill	Shop.
	Friday		Shop			Shop	
	Saturday	Shop		Shop	Shop		Shop.
Sub-Fresh.	Monday	Shop	Draw and drill.	Shop	Shop	Shop	Shop.
	Tuesday	Draw and drill	Shop	Draw and drill	Draw and drill	Draw and drill	Draw and drill.
	Wednesday	Shop	Draw and drill.	Shop	Shop	Shop	Shop.
	Thursday	Draw and drill	Shop	Draw and drill	Draw and drill	Draw and drill	Draw and drill.
	Friday	Shop		Shop	Shop		Shop.
	Saturday		Shop			Shop	
Fresh.	Monday	Draw and drill.	Shop	Draw and drill	Draw and drill	Shop	Draw and drill
	Tuesday	Shop	Draw and drill	Shop	Shop	Draw and drill.	Shop
	Wednesday	Draw and drill	Shop.	Draw and drill.	Draw and drill	Shop	Draw and drill.
	Thursday	Shop	Draw and drill	Shop	Shop	Draw and drill	Shop.
	Friday		Shop			Shop	
	Saturday	Shop		Shop	Shop		Shop.
Sopho.	Monday	Shop	Draw and drill	Shop	Shop	Draw and drill	Shop.
	Tuesday	Draw and drill	Shop	Draw and drill	Draw and drill	Shop	Draw and drill.
	Wednesday	Shop.	Draw and drill		Shop	Draw and drill	Shop.
	Thursday	Draw and drill	Shop	Draw and drill	Draw and drill	Shop	Draw and drill.
	Friday			Survey			
	Saturday	Phys. lab'y	Survey	Chem. lab'y	Phys. lab'y	Shop	Chem. lab'y.

NOTE—Chemical Laboratory—Chem. lab'y; Biological Laboratory—Biol. lab'y; Physical Laboratory—Phys. lab'y; Geological Survey—Geol. survey; Draw—Drawing.

Schedule for Practical Exercises—Afternoon Work—Continued.

Class.	Day.	MECHANICAL ENGINEERING COURSE.			MECHANIC ARTS COURSE.		
		First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.
Junior.	Monday	Draw and drill	Shop	Draw and drill			
	Tuesday	Shop	Draw and drill	Shop			
	Wednesday	Draw and drill	Shop	Draw and drill			
	Thursday	Shop	Draw and drill	Shop			
	Friday	Chem lab'y	Chem. lab'y	Chem. lab'y			
	Saturday						
Senior.	Monday	Shop	Draw and drill	Shop			
	Tuesday	Draw and drill	Shop	Draw and drill			
	Wednesday	Chem. lab'y	Draw and drill	Chem. lab'y			
	Thursday	Draw and drill	Chem. lab'y	Draw and drill			
	Friday	Shop		Phys. lab'y			
	Saturday		Shop				

NOTE—Chemical Laboratory—Chem. lab'y; Biological Laboratory—Biol. lab'y; Physical Laboratory—Phys. lab'y; Geological Survey—Geol. survey; Draw—Drawing.

Schedule for Practical Exercises—Afternoon Work—Continued.

Class.	Day.	NORMAL COURSE.			CLASSICAL COURSE.		
		First Term.	Second Term.	Third Term.	First Term	Second Term.	Third Term.
A Class.	Monday	Draw and drill	Farm or shop	Draw and drill	Farm or shop	Draw and drill	Farm or shop.
	Tuesday	Shop or farm	Draw and drill	Farm or shop	Draw and drill	Farm or shop	Draw and drill.
	Wednesday	Draw and drill	Farm or shop	Draw and drill	Farm or shop	Draw and drill	Farm or shop.
	Thursday	Shop or farm	Draw and drill	Farm or shop	Draw and drill	Farm or shop	Draw and drill.
	Friday		Farm or shop		Farm or shop		Farm or shop.
	Saturday	Shop or farm		Farm or shop		Farm or shop	
Sub-Fresh.	Monday	Shop or farm	Draw and drill	Farm or shop	Draw and drill	Farm or shop	Draw and drill.
	Tuesday	Draw and drill	Shop or farm.	Draw and drill	Farm or shop	Draw and drill	Farm or shop.
	Wednesday	Farm or shop	Draw and drill	Farm or shop	Draw and drill	Farm or shop	Draw and drill.
	Thursday	Draw and drill	Farm or shop	Draw and drill	Farm or shop	Draw and drill	Farm or shop.
	Friday	Shop or farm		Farm or shop		Farm or shop	
	Saturday		Farm or shop		Farm or shop		Farm or shop.
Fresh.	Monday	Draw and drill	Farm or shop	Draw and drill	Farm or shop	Draw and drill	Farm or shop.
	Tuesday	Farm or shop	Draw and drill	Farm or shop	Draw and drill	Farm or shop	Draw and drill.
	Wednesday	Draw and drill	Farm or shop	Draw and drill	Farm or shop	Draw and drill	Biol. lab. or f'm or sh'p.
	Thursday	Farm or shop	Draw and drill	Farm or shop	Draw and drill	Farm or shop	Draw and drill.
	Friday		Farm or shop		Farm or shop		Farm or shop.
	Saturday	Farm or shop.		Farm or shop		Farm or shop	
Sopho.	Monday	Farm or shop	Draw and drill	Farm or shop	Draw and drill	Farm or shop	Draw and drill.
	Tuesday	Draw and drill	Farm or shop	Draw and drill	Farm and shop	Draw and drill	Farm or shop.
	Wednesday	Farm or shop	Draw and drill		Draw and drill	Farm or shop	Draw and drill.
	Thursday	Draw and drill	Farm or shop	Draw and drill	Farm and shop	Draw and drill	Farm or shop.
	Friday			Survey			
	Saturday	Phys. lab'y	Survey	Chem. lab'y	Phys. lab'y	Farm or shop	Chem. lab'y.

NOTE.—Chemical Laboratory—Chem. lab'y: Biological Laboratory—Biol. lab'y; Physical Laboratory—Phys. lab'y; Geological Survey—Geol. survey; Draw—Drawing.

Schedule for Practical Exercises—Afternoon Work—Continued.

Class.	Day.	NORMAL COURSE.			CLASSICAL COURSE.		
		First Term	Second Term.	Third Term	First Term.	Second Term.	Third Term.
Junior.	Monday				Farm or shop	Draw and drlil	
	Tuesday				Draw and drill		Draw and drill.
	Wednesday				Farm or shop	Draw and drill	Farm or shop.
	Thursday				Draw and drill	Farm or shop	Draw and drill.
	Friday				Chem. lab'y	Chem. lab'y	Chem. lab'y.
	Saturday					Geol. survey	Geol. survey.
Senior.	Monday				Draw and drill	Farm or shop	Draw and drill.
	Tuesday				Farm or shop	Draw and drill	Chem. lab'y.
	Wednesday				Draw and drill		Draw and drill.
	Thursday				Chem. lab'y	Draw and drill	Farm or shop.
	Friday					Chem. lab'y	Survey.
	Saturday				Farm or shop	Survey	

NOTE—Chemical Laboratory—Chem. lab'y; Biological Laboratory—Biol. lab'y; Physical Laboratory—Phys. lab'y; Geological Survey—Geol. survey; Draw—Drawing.

POST GRADUATE COURSES.

Requirements for the Degree of Master of Arts (M. A.).

Applicants for this degree must have previously taken the Degree of B. A. and in addition must take, at the University, for a full scholastic year, four daily studies appointed by the Faculty.

Requirements for the Degree of Master of Science (M. S.).

Applicants for this degree must have previously taken the Degree of B. S., and in addition must take, at the University, for a full scholastic year, four daily studies appointed by the faculty.

Requirements for the Degree of Doctor of Philosophy (Ph. D.).

1. This degree will be conferred for distinguished attainments, as shown by examination and thesis, in any one of the five following languages: Latin, Greek, German, French and English, together with subordinate attainments in two others of the five; or, for distinguished attainments in one principal and two subordinate of the following sciences: Chemistry, Physics, Geology, Biology; or, for distinguished attainments in Philosophy or in Pure and Applied Mathematics.

2. This degree shall be open to persons who have received the Degree of B. A. or B. S., at this or other reputable institutions; or B. C. E., or B. M. E. from this institution; or to any person who can, by a thorough examination, show attainments equal to those indicated by these degrees.

3. No applicant shall be admitted to examination for this degree before two full scholastic years from the date of his admission to the course, shall have passed. The last of these two years must be passed by the candidate in resident study at the University.

4. Applicants for this degree must state in their application what particular line of study they wish to pursue.

5. A thesis, showing original research shall be required of every applicant, the subject of which shall be announced and passed upon by a committee of the faculty at least one year before the time set for the final examination, and the thesis itself must be presented to the committee two months before admission to the examination. Twenty-five copies of the approved and printed thesis shall be placed in the University Library.

6. All applicants for this degree, who have previously taken the B. S., M. S., B. C. E., or B. M. E. Degree, must by the end of the first year of the course, be sufficiently conversant with French and German to read with ease any scientific work written in these languages.

OUTLINE OF STUDIES.

DEPARTMENT OF AGRICULTURE, CHEMISTRY AND MINERALOGY.

GEO. D. PURINTON, PROFESSOR.

——————————, ADJUNCT PROFESSOR.

——————————, FOREMAN OF THE FARM.

The equipment of the Agricultural Department consists of 160 acres of land, 120 acres of which is susceptible of cultivation, and sixty acres of which is actually under cultivation; a large and commodious barn, containing stalls for horses and cows, abundant storage room for hay and feed, with lifting forks and storage car, granary, vegetable and tool storage rooms, central hallway and threshing floor, open shed extending full length of the barn, and ample means of ventilation at the top of the roof; an artesian well, with windmill for hoisting, and an elevated iron tank for storing water, which is piped to different parts of the farm; one team of elegant blooded draft horses, one team of serviceable mules, two wagons, mowing machines, reapers, rakes and other implements and machinery suitable to the purposes of a well equipped farm.

A large part of the tillable land has been recently cleared and put under cultivation, and more than half of it has been grubbed free from stumps and roots, and all enclosed with a neat fence of wire and boards, consisting of one board at the bottom one foot wide, followed by three barbed wires, one six-inch board and two wires at the top, the whole being more than five feet in height.

The great care with which the stumps and roots of the new ground have been removed renders this portion of the farm as efficient in production as that of most tracts which have been cultivated for years. A new orchard of choice varieties of fruit was planted near the University two years ago, and is now in a fine state of cultivation and growth.

At the beginning of the present growing season (1887), a number of *experimental plats* were laid off and planted to more than sixty varieties of standard forage, field and garden plants, under the direction of the Superintendent of Agriculture, and bid fair to furnish sufficient seed to stock the farm with these several varieties.

Several acres of corn are in successful cultivation and will be converted into ensilage and preserved in silos which have been erected for that purpose. Fine breeds of cattle and horses, and dairy and creamery appliances will be added as the wants and facilities of the Department demand.

THE BARN,

recently erected, is 38x60 feet with its greatest length north and south, contains five stalls with mangers, 6x14 feet, one central hallway closely floored 12x38 feet, one granary 12x15 feet, one room for storing vegetables 12x15 feet, one room for agricultural implements 12x15 feet, one general storage room 12x15 feet, and a loft or mow for storing hay and feed 60x38 feet, provided with a central carriage-way and storing car connecting with the large lifting fork at the end of the building. There are two large and well constructed ventilators raised above the comb of the roof, and in the rear of each stall is a suitable opening for ventilating purposes.

The barn, stock and farm are under the direct care of the foreman of the farm, who is an experienced practical farmer, and lives upon the premises.

In the application of scientific principles to practical agriculture care will be had for the special needs of Arkansas and the further development of her farming interests.

AGRICULTURE.

THE COURSE OF STUDY.

The design of this course is to meet the wants of those who desire a knowlege of the sciences which underlie theoretic and practical agriculture, and at the same time to furnish a good English education.

The course has been drawn so as to embrace a full course in Scientific Agriculture and Horticulture, and as much English, Mathematics, and General Science, as practicable within its scope. The principles taught are made practical by daily work, on the part of the student, in the Laboratory, workshop and field, and for such work the student is allowed a compensation of three cents per hour for shop, and five cents per hour for farm work.

It is the object of the course to apply the principles of Science to the manifold and diversified industries of the farm and home, and in so far as practicable, to promote a study of the problems which underlie economic production, and uniformity in agricultural methods and practice.

It is believed that the labor system, in connection with the scientific phases of the course, will render it invaluable to the student, by giving him an intimate knowledge of farm management, stock-breeding, dairy husbandry, and other details of practical farming.

The course embraces in the Freshman year, a theoretic and practical study of the location and selection of farms, laying out of experimental plats, fertilization of worn lands; farm buildings, etc.

In the Sophomore year stock-feeding and dairy husbandry are studied, with special reference to their economic importance, their chemical relations, the adulteration of food, imitations of butter, etc.

The Junior year will be employed in the study of the chemical composition of soils and plants, their adaptation to each other and rotation of crops. Stock-breeding, veterinary science, and the study of cereals, grasses, forage plants, pasturage and chemical fertilization, are taken up in regular order during the Senior year.

Practical Agriculture, or Horticulture and Landscape Gardening are required throughout the course.

Students by laboring on the farm can earn nearly or quite enough to pay their board.

Instruction is given by lectures, text and reference books, and by practical work on the farm.

Freshman Class—Selection, laying out and improvement of farms and experimental plats—renewing of worn lands—erection and planning of farm buildings—preparation of composts.

Sophomore Class—Stock breeding—dairy husbandry.

Junior Class—Chemical composition of soils and plants, and their adaptability to each other—rotation of crops.

Senior Class—Lectures on Veterinary Science—study of the cereals, grasses, forage plants, pasturage—chemical fertilization.

Practical Agriculture or Horticulture throughout the course.

Text and Reference Books—Lectures, Emerson and Flint, Arnold, Chauveau, Percival, Clater, Steel, Dobson, Hill, Williams, Robertson, Finlay, Morton, Wood, Green, Flemming, Foster, Dalton.

As will be seen by consulting other parts of the catalogue, the practical exercise, or "work," in the Agricultural course, consists of work upon the farm and in the various shops of the Mechanical Department,Drawing, Laboratory practice, and field work in Botany and Geology. These exercises are so combined and arranged as to both interest and instruct the student, while the tedium of physical labor is relieved from day to day by a variety of exercise.

In the Laboratories the student is taught Practical Chemistry, Botany, Zoology and Physics,while in his field excursions he is taught the principles of surveying both land and geologic, and the collection, classification and preservation of plants. On the farm he will be taught the art of practical farming, stock raising and dairy production, while in the shops he will learn those features of mechanism, and that familiarity with the use of tools and machinery so essential to every successful farmer.

A considerable time during the course will be devoted to practical Horticulture, the growing, pruning, grafting and budding of trees and vines, and in landscape gardening and decoration, under the direct supervision of the Professor of Agriculture.

CHEMISTRY.

The Chemical Laboratory consists of a commodious lecture room provided with water sinks, pneumatic troughs, tables for illustration and cases for chemicals and apparatus ; an analytical laboratory with work tables, desks, shelves and drawers for thirty students, water and gas supply, vacuum pumps, hoods, distilling apparatus and storage case for chemicals and apparatus ; and a balance room with excellent light, and containing a pair of Becker's best and most accurate chemical balances.

The course embraces inorganic, organic, analytical, agricultural and industrial chemistry, including the Chemistry of Light and Photography.

Instruction is given by means of text books, lectures, class illustrations and laboratory practice. The elementary princiciples of chemistry and chemical philosophy are thoroughly taught, and the facts of chemistry impressed by copious experiments performed by the student. Blowpipe analysis, qualitative and quantitative analysis, assaying and metallurgy, are taken up in proper order. After completing a suitable course of laboratory practice, the further practical study of chemistry by the student will be determined by the object he may have in view. Agricultural chemistry is a prominent feature of the course.

Sophomore Class—General Chemistry, Inorganic and Organic; Laboratory practice, and preliminary analysis.

Junior Class—Qualitative Analysis, metals, acids, waters, poisons, soils; Quantitative Analysis, metals.

Senior Class—Quantitative Analysis, metals, soils, water, fertilizers, butter, cheese, farm products.

Text and Reference Books—Elliott and Storer, Appleton's Series, Clowe, Harcourt, Fresenius, Lupton, the Johnsons, Church, Wagner, Wurtz, Miller, Watt, Liebig.

MINERALOGY.

The Mineralogical Laboratory is provided with work tables, blow-pipes and lamps for twenty students, when all are provided with magnets, mortars, and other facilities for the determination of minerals. This Laboratory also contains combustion, crucible, muffle and roasting furnaces for both coal and gas, water supply, hoods, vacuum pumps, ore crusher, grinder, and samplers, and is provided with Bunsen burners.

The study of Mineralogy includes the study of Crystallography with the occurrence, properties, forms and uses of the principal minerals. Determinative Mineralogy forms the most important part of the course, and is studied practically with the aid of lens, magnet, blow-pipe and simple analysis. Especial attention is given to the determination of the minerals and the assaying of the ores of the State.

The study of Determinative Mineralogy embraces the blow-pipe analysis of all the common and many rare minerals,the assaying of ores of gold, silver, lead, zinc, manganese, iron coal, limestone and clay, and a course in mining.

Junior Class—Crystallography—practical determination of minerals with the blow-pipe, and simple analysis.

Senior Year—Assaying of ores of gold, silver, lead, zinc, manganese, iron, coal, limestone, clay; lectures on mining.

Text and Reference Books—Dana, Brush, Plattner, Rickets, Mitchell, Crook and Rohrig, Phillips.

The Chemical and Mineralogical Laboratories have been greatly developed by the addition of a gas supply, vacuum pumps, assay, combustion and blast furnaces, water sinks and taps, planitum and porcelain goods, choice chemical reagents, and a cabinet of fine and rare minerals, comprising some valuable ores and native metals. During the past year several valuable minerals and native ores have also been added. A full set of photograpic instruments and appliances are in use in the Chemical Laboratory for illustration in the study of the chemical properties of light.

Special attention will be given to Microscopic Photography and the preparation of lantern slides, and instruction in Practical Photography will be given privately, at the discretion of the Faculty, to those who may desire it.

GENERAL SCIENCE COURSE.

This course is intended to offer thorough and extensive training in the principles of General Science, together with English, and French and German as electives.

Especial attention is paid to the Physical and Biological Sciences.

An Elementary course embracing Chemistry, Botany and Zoology is taken in the Sub-Freshman year and followed by a continuation of these subjects with copious laboratory and practical work, together with a full course in Physics, throughout the collegiate years. It is believed that the advantages offered in Chemistry, Biology and allied sciences in this course, will be found scarcely inferior to those of similar courses in any of our higher institutions of learning. The well equipped Chemical, Mineralogical and Physical Laboratories of the University afford ample means of illustration as well as excellent opportunities for practical scientific work, and for original investigation.

Especial attention is paid in this course to practical astronomy. The University owns a fine new equatorial telescope, and other useful and valuable pieces of apparatus for illustration in this department as well as in that of Meteorology. Those who satisfactorily complete the course in General Science are entitled to the degree of B. S. (Bachelor of Science.) The afternoon labor exercises in this course are confined to the Laboratory, Shop, Field Surveying, and Drawing, but the student may substitute work on the farm for part of his shop work if he so desires. The course in General Science is open to all Beneficiaries, but if they choose to take additional work in French or German they must pay the regular tuition fee of ten dollars per year.

DEPARTMENT OF MECHANIC ARTS AND ENGINEERING.

J. M. WHITHAM, Professor.
W. E. ANDERSON, Adjunct Professor.
J. W. MAYO, Instructor in Metal Work.
.... Instructor in Wood Work.
L. C. GARDINER, Instructor in Forge and Foundry.
LEE TREADWELL, Instructor in Field Engineering.

Three courses of study are offered in this department, viz:

1. *Mechanic Arts Course.*
2. *Mechanical Engineering Course.*
3. *Civil Engineering Course.*

I. COURSE IN MECHANIC ARTS.

The course of study, published elsewhere in this Catalogue, comprises the studies in the Mechanical Engineering course through the Sophomore year. It is intended to correspond to the course in Manual Training Schools, and, since it consists of 1517 hours actual work in the shops, a good English course, a good general course in Science, Mathematics through Trigonometry, and 780 hours practice in Drawing, it will compare favorably with the course in any school. The graduate is prepared for the practical duties of a machinist or draughtsman; by continuing two years longer he becomes a Mechanical Engineer.

Table showing the distribution of time in hours in the Mechanic Arts Course.

SUBJECTS.	CLASS.				TOTAL HOURS.
	A.	Sub-Fresh	Freshman.	Sophomore	
English, History, etc.	390	247	130	86⅔	853⅔
Science	....	143	130	86⅔	359⅔
Pure Mathematics	130	130	130	130	520
Applied Mathematics	....	....	130	216⅔	346⅔
Shop Work	390	390	390	346⅔	1516⅔
Free-Hand Drawing	195	195	....	....	390
Mechanical Drawing	....	....	195	195	390
Laboratory Work	....	....	....	43⅓	43⅓
Total Theoretical Work	520	520	520	520	2080
Total Practical Work	585	585	585	585	2340
TOTAL WORK	1105	1105	1105	1105	4420

SUBJECTS TAUGHT IN THE SHOP.

First, carpentry and joinery; second, wood-turning; third, cabinet making and practical carpentry; fourth, pattern-making; fifth, foundry work; sixth, forging; seventh, metal fitting; eighth, machine tool work; ninth, care of steam engines and boilers. The time devoted to each branch is shown in the scheme below:

Scheme Showing Course of Systematic Instruction in the Work Shops.

Section of Class.	Sub-Section.	First Term.	Second Term.	Third Term.
A	A	Fundamental principles o Carpentry and Joinery by systematic course of exercises	Practical cabinet making.	Practical cabinet-making, one-thirds term. Wood-turning lathe, two-thirds term.
	B		Wood-turning lathe, two-thirds term .... Practical cabinet-making, one-third term........	Practical cabinet making
	C		Practical cabinet-making, two-thirds term........ Wood-turning lathe, one-third term	Wood-turning lathe, one-third term. Practical cabinet-making, two-thirds term.
Sub-Freshman.	A	Forging.................	Forging, one-half term.. Foundry work, one-half term............... ..	Foundry work.
	B	Foundry work	Foundry work, one-half term... .... Forging, one-half term..	Forging.
* Freshman.	A	Metal fitting......	Metal fitting, one-half term . ... Pattern making, one-half term..................	Manufacture of agricultural machines and practical carpentry, two-thirds term. Pattern making, one-third term.
	B	Manufacture of agricultural machines and practical carpentry for two-thirds term............ Pattern making, one-third term....	Pattern making, one-half term .... Metal fitting, one-half term	Metal fitting.
† Sophomore.		Machine tool work—engine lathe, planers, drilling machine, milling machine, etc.	Machine tool work—engine lathe, planers, drilling machine, milling machine, etc......	Machine tool work—engine lathe, planers, drilling machine, milling machine, etc.

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* One student is in charge of tool room.

† One student from this class is with engine and boiler.

SHOP EQUIPMENTS.

The shops of this department are to be put in the basement of the University building this summer, and will be ready for use by the first of September, with the following rooms and equipments:

WOOD-WORKING ROOM.

This room is 40x60 feet, and will contain 17 work benches, supplied with Wilkinson's patent wood-worker's vises, two locked closets, and 17 complete sets of carpenter's tools, containing the following: 1 jack plane, 1 fore plane, 1 smoothing plane, 1 claw hammer, 1 mallet, 1 oil stone, 1 try square, 1 bevel square, 1 mortise gauge, 1 brad awl, 1 pair of dividers, 1 2-foot rule, 1 24-inch cross-cut saw, 1 12-inch back saw, 1 screw driver, 1 dust brush, 6 firmer chisels, 1 1-2, 1, 7-8, 5-8, 3-8, 1-4 inch; 2 mortise chisels, 1-2, 3-4 inch; 4 gouges, 1, 3-4, 1-2, 3-8 inch; 1 brace and 8 bits, 5-8, 9-16, 1-2, 3-8, 5-16, 7-16, 1-4, 3-4 inch, for each two benches; 9 wood-turning lathes, 5 10-inch swing, 2 9-inch swing, 1 12-inch swing, 1 7-inch swing, with complete sets of turning tools containing 3 gouges 1, 1-2, 1-4 inch; 8 chisels, 1 1-4, 1, 5-8 3-4, 1-2, 1-4 inch, half-round, 1 parting, 1 pair of calipers, 1 1-foot rule, 1 oil can, 1 oil stone, 1 dust brush, 1 double circular saw, 1 band saw, 1 scroll saw, 1 planing machine, 1 shaping machine, 1 steam glue pot; and there will be kept in the tool room for use in this room a complete set of augers, a complete set of clamps, 3 drawing-knives, a large assortment of bits, 2 ripsaws, 1 hatchet, 1 ratchet brace, 3 spoke shaves, 1 spring plane, 3 shrink rules, and other tools.

FINISHING ROOM.

This is a well lighted and close room 19x23 feet, and will contain 2 benches and all the tools and materials needed in finishing. This will also be used as a show room for articles manufactured in the shops.

THE FORGING ROOM

is 22x29 feet, and will contain 7 power blast forges of most approved design, 7 anvils, 7 sets of smithing tools containing 1 hardy, 1 hand hammer, 6 pairs of tongs, flat 1-2, 3-8, 1-4 inch, bow 3-4 inch, round nose 9-16 inch, tool 1 1-8x1-2 inch, 4 benches with vises, and tools as follows: 1 square, 1 dust brush, 2 files, 10 "bastard" flat, 10 "bastard" 1-2 round, 1 cold chisel, 1 pair calipers, and 4 sets of tools (one for each two forges) consisting of 1 sledge, 1 flatter, 1 swage, 1 fuller, 1 eye punch, 1 cold chisel, 1 hot chisel, one complete set of heading tools from 1-8 to 3-4 inch, 1 set of size pins from 1-8 to 3-4 inch. A No. 3 Sturtevant blower will furnish the blast for the forges, and cupola.

THE FOUNDRY

is a room 23x26 feet, and will be equipped with 7 moulder's benches with sand troughs, and sets of moulder's tools, consisting of 2 flasks, 1 bellows, 1 trowel, 2 slickers, 1 mallet, 1 swab, 1 pattern brush, 1 pair of rammers, 1 water pan, 1 sand pan, 1 riddle, 1 dust brush, 1 large sieve, 1 core oven, 1 brass furnace, 2 ladles, 2 skimmers, 1 wheel-barrow, 1 pair of platform scales (portable), a number of extra flasks, and other special tools. The cupola is outside of this room but is very convenient.

METAL-WORKING ROOM.

This room is 20x80 feet, and will contain 10 work-benches with vises, two locked closets, and complete sets of fitter's tools, consisting of the following: 1 machinist's hammer, 1 cold chisel, 7-8 inch, 1 cape chisel, 2 half-round chisels, 1-2, 1-4 inch, 1 center punch, 1 scratch awl, one pair of spring dividers, 4 inches, 1 pair of outside calipers, 4 inches, 1 steel rule, 4 inches, 1 hardened steel square, 4 1-2 inches, 10 files (assorted), 1 file card, 1 dust brush, 5 engine lathes, 2 12-inch swing, 3 14-inch swing, a complete set of tools for each lathe, 1 speed lathe 9-inch swing, 1 small planing machine, 20x10x9 inches, 1 large planing machine, 22x22x60 inches, a set of tools for each planing machine, 1 drill press, 1 universal milling machine (B & S), 1 Emery grinding machine, 1 grinding stone. There will be kept in the tool room for use in this department 1 set of taps and dies, 1 set of pipe dies, 1 set of pipe tongs, 2 pipe cutters, 1 set of twist drills, 1 set of reamers, 2 lathe chucks, 12 and 14 inches, 2 drill chucks, a large assortment of files, hammers of various sizes, large and small monkey wrenches, 1 centering square, several large and small squares, steel rules of different lengths, a collection of inside and outside calipers, a number of lathe dogs, 1 Victor micrometer caliper, cold chisels of various sizes and shapes, etc.

ENGINE AND BOILER ROOM.

This room is 20x30 feet and there will be in it a 25-horse power engine, which will supply power to the shops, and one of the large steel boilers which has been used for heating the building, and 1 Deane steam pump. There will be in the tool room for use in this room 1 steam engine indicator, a calorimeter, registering steam gauge and other instruments for making tests of engines and boilers.

TOOL ROOM.

There will be a room 12x14 feet, in which all tools for general use in the shops will be kept, and in connection with this the check system will be adopted; that is, each student in the shops will be assigned a number, (from 1 to the number of students in the shops), and he will have several brass checks with this number stamped on them, and each tool will have its place in the room. When a student wants a tool he will ask the man in charge of the tool room for it and at the same time hand him a check, the man in charge will hand the tool out and hang the check in the place of the tool. In this way the tools are registered without trouble.

A WASH ROOM

Will be provided with water, basins, towels, etc., and hooks for hats and coats will be put up.

A room 22 x 20 feet will be used as a store room for materials and general supplies.

CAPACITY OF THE SHOPS.

Fifty students can be accommodated in the shops at one time, divided among the rooms as follows:

Wood-working room	20
Metal-working room	14
Forging room	7
Foundry	7
Tool room	1
Engine and boiler room	1

INSTRUCTION IN THE SHOPS.

ADJ. PROF. ANDERSON, SUPERINTENDENT.

Many people insist that the proper way to teach the mechanic arts is by manufacturing articles from the start, thereby requiring the application of principles never learned. The result of such training is, what we find every day, men who are said to be mechanics, and yet who can do only those things which they have done or seen done, because they do not understand the principles involved. The absurdity of this method of teaching will be obvious to any one. It is generally admitted that the proper way to teach arithmetic, for instance, is to teach the student the fundamental principles of addition, subtraction, etc., and, in order to *fix* these principles, practical problems are given at intervals; when the principles are acquired, he is able to apply them in all ordinary calculations. It is possible for him to solve a problem without understanding the principles, by memorizing the figures and their places, and, should he live long enough, he might memorize most of the ordinary calculations, and possibly be able to discover some of the principles involved. It is not hard to see the advantages of the first over the second method, and there is no essential difference between the method which should be followed in teaching arithmetic and that required in teaching the mechanic arts. Hence the student will first pass through a course of graded exercises, which clearly set forth all the principles and fundamental operations. These exercises will be arranged with regard to their educational advantages alone. If useful articles can be made without detriment to the systematic instruction they will be, but, in general, only the principles will be taught until after the sophomore year. Students who have been through the four years' course ending with the sophomore class will manufacture articles for the market.

DETAILS OF INSTRUCTION IN WOOD-WORK ROOM.

Instruction in this room will embrace:

1. The names and uses of tools and their care.
2. Fundamental principles of carpentry and joinery.
3. Wood-turning.
4. Practical cabinet making and carpentry.
5. Pattern-making.

The student will be taught how to use the tools by performing typical operations with each one.

The Fundamental principles of carpentry and joinery will be taught in a regular, systematic course of exercises, beginning with the simplest and most easily constructed of all joints and progressing through the more difficult until all the underlying principles have been illustrated. One hundred and thirty hours will be devoted to these exercises.

Wood-turning will consist in, first, the care and use of the lathe and tools; then will follow progressive exercises ranging from the turning of a simple cylinder to the most complex and difficult chuck and eccentric work. Eighty-seven hours will be spent on the lathe.

PRACTICAL CABINET-MAKING AND CARPENTRY.

The student will now apply the principles already learned by constructing articles to be put on the market; and will, also, be taught the use of the circular saw, band saw, planing machine, shaping machine, etc. He will also learn how to finish in oils, shellac, paints and varnishes. Furniture and other useful articles will be manufactured. Two hundred and thirty-eight hours will be devoted to this work.

PATTERN MAKING.

It is supposed that the student is now familiar with wood-working tools and machines, and that he possesses a fair degree of skill in their use. The work of this course, though well calculated to give increased skill, will be arranged with reference to the principles of pattern construction. There will be no fixed course of exercises in pattern making but the patterns will be made as required for use in the foundry. The object is to afford such practice as will develop the details of the work, the manner in which the different pieces of wood should have the grain lie, where and what allowances are to be made for warping, shrinkage, finish, etc., and in what manner different patterns should be constructed to draw properly from the sand. One hundred and nine hours will be devoted to this work.

DETAILS OF INSTRUCTION IN FORGING ROOM.

LEWIS C. GARDINER, INSTRUCTOR.

The use and care of fires will be first taught. Then will follow instruction in

1. *Iron Forging.*
2. *Steel Forging.*

Iron Forging will be taught by a systematic, progressive course of exercises, which, when completed, will have thoroughly familiarized the student with all the operations of forging, such as drawing, upsetting, cutting, punching, bending, welding, etc.

To save time and expense when a difficult exercise is to be performed, the student will first perform it with a bar of lead, so that he may study the methods of holding and striking. It is evident that had he used iron instead of lead at first, several pieces might have been burnt before he succeeded in producing the desired form. The black-board will be freely used in this room, as in all others. Suppose, for instance, that the exercise is "to make two links of a chain." The instructor will make several sketches on the black-board, illustrating the various stages to be passed through in going from the "rough stock" to the finished links; or first, a sketch showing the size of the "stock;" then a sketch showing the bar when drawn down to the proper diameter and lengthened sufficiently to make the links; then a sketch showing the bar cut and the pieces bent in the forms of links; then a sketch showing the ends prepared for welding, and finally a sketch showing the finished link. After the principles have been acquired, the student will do the forging needed by the other departments of the shop. One hundred and fifty hours will be devoted to this work.

Steel Forging. Instruction will be given in the peculiar properties of steel, how to harden and temper it and how to weld. Especial attention will be given to tool dressing. Forty-seven hours will be devoted to this work.

INSTRUCTION IN THE FOUNDRY.

LEWIS C. GARDINER, INSTRUCTOR.

Instruction will be given in moulding, in green and dry sand and loam, and in casting iron and various alloys. The exercises will be progressive, advancing from the simplest to the most difficult and complicated work. Small castings, chiefly, will be made. Students will learn how to charge and attend the *cupola*, and each in turn will have charge of a melting. They will learn the different properties of the various mixtures of irons of different grades, which mixture is the strongest, which the softest, and which will stand severe shocks, etc., as well as the properties of alloys which will be cast under fluid pressure. One hundred ninety-four hours will be devoted to this department.

INSTRUCTION IN METAL-WORKING ROOM.

J. WALTER MAYO, INSTRUCTOR.

The instruction given will consist of:

1. *Metal Fitting.*
2. *Machine-Tool Work.*

Metal-Fitting will be taught by a graduated course of exercises. After acquiring a knowledge of the names, care and use of the tools, the students will have practice in chipping, filing, scraping, polishing, drilling, tapping, riveting, and piping. They will then be prepared to fit journal boxes, cut key-ways, manufacture hammers, wrenches and many other useful articles. One hundred and ninety-seven hours will be devoted to this work.

Machine-tool work consists in exercises at the engine and speed lathes, planing, milling, drilling and grinding machines. Each student will be taught the theory, capabilities and most advantageous manner of using each of the machines and the speed of rotation necessary for various kinds of work. Special attention will be given to the marking and laying out of work. After being familiar with the use of each machine, work will be done by the students on salable articles, such as steam engines, pumps, etc.

INSTRUCTION IN CARE OF ENGINES AND BOILERS.

PROF. ANDERSON.

It is not intended to make a theoretical study of engines and boilers, since that properly belongs to the senior year of the mechanical engineering course; but, as many will not be permitted to pursue the mechanical course after the sophomore year, it is thought best to thoroughly familiarize them with the care and management of this important motor, and particularly the names and functions of the several parts. Hence one student will be detailed each day for instruction in the engine and boiler rooms, and special instruction will be given to the whole class during the third term, once each week. Engine and boiler tests will be made, and the use of the indicator fully explained.

2. COURSE IN MECHANICAL ENGINEERING.

This course has been revised and extended, and is believed to offer special inducements to the young men of the State. Mechanical engineering may be defined as being the application of mathematics to science, with particular reference to the *design and fabrication* of all forms of machinery. Since engineering is the combined science and art of utilizing the forces and materials of nature, and since this utilization is accomplished in nearly all cases by machines, or by processes working through machines, it is evident that *mechanical engineering is the basis of all art and industry*.

The course of study is published elsewhere in this Catalogue. It is based on the belief that a mechanical engineer should be a mathematician, a scientist, a draughtsman and a mechanic. The course extends over six years, and consists of *3120 hours devoted to theoretical, and 3510 hours to practical instruction.* The distribution of time among the several branches, both theoretical and practical, is shown in the following:

Table showing the Distribution of Time in the B. M. E. Course.

SUBJECT.	CLASS.						TOTAL HOURS.
	A	Sub-Fresh.	Fresh.	Sopho.	Junior.	Senior.	
English, History, etc.	390	247	130	86⅔	......	......	853⅔
Science	.....	143	130	173⅓	130	86⅔	663
Pure Mathematics	130	130	130	130	130	.....	650
Applied Mathematics	.....	......	130	130	260	433⅓	953⅓
Shop Work	390	390	390	216⅔	260	216⅔	1863⅓
Drawing	195	195	195	195	195	195	1170
Surveying	......	.....	.....	86⅔	......	.....	86⅔
Laboratory Work	......	.....	......	86⅔	130	173⅓	390
Theoretical Work	520	520	520	250	520	520	3120
Practical Work	585	585	585	585	585	585	3510
Total Work	1105	1105	1105	1105	1105	1105	6630

In addition to the above, Students in Mechanical and Civil Engineering may take French and German as elective studies.

3. COURSE IN CIVIL ENGINEERING.

Civil engineering, as here understood, embraces the location and construction of railroads, canals, water works, sewage systems, foundations on land and in water, tunnels and superstructures; the surveys, improvements and defenses of coasts, harbors, rivers and lakes; the application of mechanics, descriptive geometry and graphics to the design and construction of arch bridges, roofs, trusses and suspension bridges; the design and fabrication of wind, hydraulic and electric motors, and air and heat engines; irrigation and drainage of lands; and the preparation of forms of specifications and contracts.

The course of study, published elsewhere in this Catalogue, has been revised and extended, and is believed to compare favorably with that in older institutions of technology. It is decidedly a *practical* course, and the graduate is well equipped for the duties of an engineer. He is, also, an excellent draughtsman and mechanic. The time in *hours* devoted to theoretical and practical instruction is shown in the following:

Table showing the distribution of time in the B. C. E. Course.

SUBJECT	CLASS.						TOTAL HOURS.
	A.	Sub-Fresh.	Fresh.	Sopho.	Junior.	Senior.	
English, History, etc	390	247	130	86⅔	....	....	853⅔
Science	....	143	130	173⅓	216⅔	86⅔	749⅔
Pure Mathematics	130	130	130	130	130	....	650
Applied Mathematics	....	....	130	130	173⅓	433⅓	866⅔
Shop Work	390	390	390	173⅓	43⅓	86⅔	1473⅓
Drawing	195	195	195	195	195	195	1170
Surveying	....	....	....	130	216⅔	130	476⅔
Laboratory Work	....	....	....	86⅔	130	173⅓	390
Total Theoretical Work	520	520	520	520	520	520	3120
Total Practical Work	585	585	585	585	585	585	3510
TOTAL WORK	1105	1105	1105	1105	1105	1105	6630

In addition to the above, students in Mechanical and Civil Engineering may take French and German as elective studies.

PRACTICE IN SURVEYING IN THE FIELD.

1. *Exercises in Land Surveying* during the second term of Sophomore year.

a. *Chain:*—Kinds, tests, use; ranging lines; chaining over hills and valleys; chaining beyond obstacles; perpendiculars and parallels; offsets and angles.

b. *Compass:*—Parts, use, adjustments; finding declination of needle; use of vernier; retracing old lines; local attractions.

c. *Levelling:*—Parts, use, adjustments of level; measuring sensibility; use of rod; differential, profile and grade levelling.

d. *Transit:*—Parts, use, adjustments; azimuth angles and vernier; traversing; locating meridian by stellar and solar observations.

e. *Solar Transit:*—Parts, use, adjustment; latitude; longitude and time; ranging lines by solar attachment.

f. *Sextant:*—Parts, use, adjustments; measuring angles of altitude and azimuth; angular levelling.

g. *Use of barometer, clinometer and optical square.*

h. *Land surveying:*—Location of lost corners; subdivision of township; locating land from description in deed; division of land.

2. *Exercises in Surveying* during the third term of Sophomore year.

A. *Topographical Surveying.*

a. *Plane table:*—Parts, use, adjustments; resection and orienting; locating boundaries; contouring.

b. *Stadia:*—Measuring local distance, distance between stadia hairs, distance from stadia hairs to object glass; graduating rod; angular levelling; use of stadia tables; profiling and contouring; keeping and plotting notes.

B. *Hydrographic Surveying.*

a. Survey of parts of White River; locating bench marks; determining water slope; gauging and rating streams; sediment observations; erosion of banks; direction and force of current.

C. *Mining Surveying.*

a. Survey of coal mine and cavern near Fayetteville. Location of claims.

D. *City Surveying.*

a. Dividing up land into city lots; survey of parts of Fayetteville; locating lots from description.

3. *Road Engineering* continuing throughout the Junior year.

It consists of reconnoissance; preliminary survey; location; profiling; establishing grade; location of curves and turnouts; cross-section levelling; locating slope stakes; measuring embankments and cuts; estimates of volume and materials used in construction; inspection and measurement of bridges over White River, near Fayetteville; improvement of highways; location and estimates for tunnels.

4. *Sanitary Surveying* during the first term of Senior year.

a. Survey of Fayetteville, embracing estimates of material required and cost of construction of a complete sewage system.

5. *Geodetic Surveying* during the second term of Senior Year.

a. Location of base line; repeated measurements of base by various methods; location and establishment of signals; manufacture and location of station marks; measuring, distributing errors and correcting angles; tertiary triangulation of the neighborhood; geodetic and precise spirit levelling.

6. *Hydraulic Surveying* during third term, Senior year.

a. Location of water works for the City of Fayetteville, embracing complete details, estimates and cost.

PRACTICE IN DRAWING.

During the Sub-Freshman and A years instruction is given in Free-Hand Drawing as explained elsewhere in this Catalogue. All of the instruction in drawing to collegiate classes is given by the Department of Engineering and Mechanic Arts. The following course is for engineering students, and will be somewhat modified for students in other departments as shall be shown to be necessary.

Freshman Year—Instruction in use of instruments; practice in reading drawings; construction of geometrical figures; elements of mechanical drawing. Great prominence is given to the study of Descriptive Geometry.

Sophomore Year—Mechanical Drawing during the first term, and Topographical Drawing during the second and third terms.

Junior Year—Architectural Drawing; linear and isometrical projections.

Senior Year—Each student will make a design and general and detailed drawing of some structure, such as a bridge or steam engine.

The new draughting room will be equipped with tables, stools, planimeter, pantograph and blue print frame. Materials will be kept on hand and supplied to students at catalogue rates. Drawing instruments will be purchased at twenty per cent. discount.

TEXT AND REFERENCE BOOKS.

Surveying.—Johnson, Gillespie, Haupt, Merrett.

Road Engineering.—Wellington, Searle, Gillmore, Gillespie.

Sanitary Engineering.—Latham, Adams, Philbrick.

Hydraulic Engineering.—Fanning, Nichol, Hennell.

Civil Engineering.—Rankine, Wheeler, Mahan.

Mechanical Engineering.—Rankine, Cotterell, Marks, Thurston, Goodeve, Unwin, Holmes, Perry, Shock.

Machine Design.—Rankine, Unwin, Anderson, Goodeve, Woods and Stahl.

Mechanics.—Rankine, Cotterell, Alexander and Thompson, Bowser, Todhunter, Smith.

Bridges.—Burr, Wood, Shreve, Greene, Waddell.

Tunnels.—Drinker, Burr.

Mechanic Arts.—Rose's Pattern Maker's Assistant and Complete Practical Machinist, West's American Foundry Practice and Moulder's Text Book, Threadgold's Carpentry, Ede on Steel, Shelley's Workshop Appliances.

ENGINEERING PERIODICALS.

The following weekly papers are taken for the benefit of engineering students, viz.:

London Engineering.

Engineering News and Contract Journal.

Sanitary Engineer.

Carpentry and Building (Monthly).

Scientific American Supplement.

Scientific American.

American Machinist.

ENGINEER'S CLUB.

During the session 1886-87 the engineering students met once a week and discussed professional topics. Duties were assigned and much time was required in preparation. Each student presented some topic in turn, and his lecture was usually one hour long. The following among other topics were discussed, viz.:

Hudson River Tunnel, Severn River Tunnel, Mersey River Tunnel, Plattsmouth River Bridge, Brooklyn Bridge, Charlottesville, Va., Water Supply, New York Water Supply, European Sewage Systems, etc., etc.

The Board of Trustees has permitted the engineering students to form a club, which is intended to take the place of these exercises.

MATHEMATICS, LOGIC AND ASTRONOMY.

PROF. MURFEE.

MATHEMATICS.

This subject should be taught both practically and logically, serving in scientific investigations and mental discipline. It is not enough to find "answers," but the deductions must be based on established principles. First, the pupil performs the work in imitation of the teacher or author; then comparing facts learned he reasons on the subject, consults the text and book of reference, makes the deduction, and applies the law to new cases. The power of original investigation and the faculty of invention are thus strengthened, and the student, by the inductive process of combining known principles and making new deductions, can anticipate the author in his demonstrations.

For admission into the Freshman Class, the applicant must pass satisfactory examination in Arithmetic and in Algebra to Quadratic Equations. It is desirable tbat he should have studied three books in Geometry, and that he should have been thoroughly drilled in Mental Arithmetic.

All students must supply themselves with drawing instruments; for much attention is paid to original investigations, in which at least the dividers and protractor are essential.

Text-Books and Books of Reference—Algebra: Robinson's University, Wentworth's Complete, Wells' University. *Geometry:* Wentworth, Loomis, Welch and Chauvenet. *Trigonometry:* Schuyler, Wells and Wentworth. *Analytical Geometry:* Loomis and Todhunter. *Calculus*: Loomis, Church and Byerly, Williamson.

ASTRONOMY.

A term is devoted principally to Descriptive Astronomy together with as much Practical as possible in so short a period.

The subject is made interesting and profitable by the use of maps, globe, astral lantern, equatorial telescope, sextant and solar compass.

Text and Reference Books: Olmstead's College Astronomy, Bowen's Astronomy of Observation, Newcomb and Holden's Astronomy, Coffin's Navigation and Nautical Astronomy, the Nautical Almanac, Loomis' Astronomy; periodical, Siderial Messenger.

LOGIC.

Logic is taught, both from text-books and by lectures. Students are required to show its application in various scientific investigations. Essays from different authors are analyzed and discussed, with a view to the appreciation of sound reasoning and the detection of fallacies. Original discourses are required of students to impress the principles taught. In this way a subject, ordinarily regarded as dry, is made of the liveliest interest.

Text Books and Books of Reference: Jevon-Hill, McCosh, Mill and Hamilton.

ENGLISH, HISTORY, FRENCH AND GERMAN.

PROFESSOR EDWARDS.

ENGLISH AND HISTORY.

The first three classes of the English course, the A class, the Sub-Freshman, and the Freshman, are devoted to the work of obtaining grammatical correctness, clearness, accuracy, ease and elegance of expression. Every effort is made to render the course rich in practical results. To this end each principle of English Grammar, Analysis, Historical Grammar, and Art and Science of Rhetoric, as it is learned, is turned to practical use in regular graded exercises. The History course extends through the Sophomore year, taking the place of English;

and here, too, regular exercises, being the discussion and answer of systematic historical questions requiring original investigation, will be a part of the year's work. The first term of the Junior year in English is devoted to detailed study of Shakspere and Chaucer; the second and third terms are employed in the study of the History of English Literature, with readings from different authors as far as time allows. The exercises in this class consist of the investigation of original questions throughout English Literature. The Senior Class has two terms on Anglo-Saxon and one on general English Philology. This gives a firm, solid basis for all previous knowledge and all future investigation of English as a language.

TEXT BOOKS.

Freshman Class.—Morris's Historical English Grammar, Bain's Rhetoric, Abbott's "How to Write Clearly," Lectures on the Science of Rhetoric.

Sophomore Class.—Fisher's Outlines of Universal History. For reference, Rawlinson, Cox, Grote, Merivale, Gibbon, Mommsen, Lodge, Green.

Junior Class.—Macbeth (Rolfe's), Chaucer's Prologue and Knights' Tale, Welsh's English Literature; for reference, Ward's English Poets.

Senior Class..—Sweet's Anglo-Saxon Primer, Cook's Siever's Anglo-Saxon Grammar, Beowulf, Andreas, Handy Anglo-Saxon Dictionary, Earle's English Philology.

A course of reading as basis for exercises will be assigned each class to meet the exigencies of the case.

FRENCH AND GERMAN.

Two years (five hours per week) are devoted to each of these languages. Conversation forms an essential element of the courses. The language taught will be used as a medium of communication in the class, and every effort will be made to enable the student to speak it fluently and correctly. The idea is to combine the "natural method" with the grammatical study necessary to a really useful knowledge of any language. French is put in the Freshman and Sophomore years, German in the Junior and Senior.

TEXT BOOKS.

Freshman Class.—Etude Progressive de la Langue Francaise, Worman's Grammaire Francaise, Saintsbury's Primer of French Literature, Voyage de Monsieur Perichon.

Sophomore Class. — Chardenal's Exercises and Idioms, with Grammar, Harrison's Syntax (for reference), Petite Histoire du Peuple Francais, Brachet's Historical Grammar, Selections from French Literature. These will be mostly of a scientific character, if the majority of the class consists of scientific students.

Junior Class.—Otis's Elementary German, Grimm's Maerchen, Conant's Primer of German Literature, Whitney's Reader and Grammar.

Senior Class.—Whitney's Grammar, Brandt's Grammar (for reference), Selections from German Literature, on scientific subjects, if the majority of the class consists of scientific students.

GEOLOGY, BIOLOGY AND PHYSICS.

PROF. SIMONDS.

GEOLOGY.

This includes Lithological, Historical and Dynamical Geology. Prominence will be given to facts having an economic bearing. Especial attention will be paid to the formation of soils and deposits of valuable minerals in Arkansas. Field excursions form part of the regular course.

Text and Reference Books: LeConte, Dana, Geike, Lyell.

BIOLOGY.

This includes Botany, Anatomy and Physiology, General Zoology and Entomology. Under *Botany* will be studied the structure, analysis and classification of plants—their geographical distribution and importance; favorable and unfavorable condition for life and growth; the use of the microscope as applied to the study of vegetable tissues, enemies, food, etc. In connection with the study of Botany, each student is required to collect, preserve, correctly classify and label, and deposit in the museum an herbarium of Arkansas plants.

Anatomy and Physiology will embrace the study of human anatomy, physiology and hygiene, including such subjects as digestion and foods, poisons and antidotes, respiration and ventilation, exercise and clothing. Under *Zoology* will be studied the classification and distribution of the forms of animal life upon the globe. Comparative Anatomy and Physiology, as preparatory to the study of stock-breeding, will receive especial attention. In connection with the study of Zoology, instruction in practical Taxidermy, Insect and Skeleton mounting is given.

Entomology will be studied with special reference to its economic relations with Agriculture and Horticulture. In the biographical sciences, instruction will be given by text-book and lectures, but all students will be required to perform simple dissections and work with the microscope; prepare, mount and preserve specimens properly classified and labeled. The University is equipped with microscopes, specimens and models.

Freshman Class.—Anatomy, Physiology and Hygiene, Systematic and Comparative Zoology, Insect and Skeleton Mounting, Taxidermy, Systematic Botany, classification of plants.

Sophomore Class.—Structural and Microscopic Botany,—Entomology. Study of insects injurious to vegetation; remedies, etc.

Junior Class.—Geology, Botany and Scientific Horticulture. Diseases of plants, cross fertilization, variation.

Senior Class.—Zoology, Comparative Anatomy, Histology, Vertebrate Dissection, Embryology, stock breeding.

During the past two years there have been added an herbarium of more than 2,500 plants, quite a number of stuffed and mounted birds, bird skins, insectivora, reptilia and fossils. Contributions to this department are solicited.

Text and Reference Books.—Gray, Bessey, Chapman, Martin, Huxley, Dalton, Carpenter, Flint, Darwin, Packard, Harris, Draper.

PHYSICS.

This course embraces recitations upon text-books, lectures, class illustrations and experiments in the Physical Laboratory. The general course extends throughout the Freshman year, and consists of the study of the branches known as heat, light, sound, electricity and magnetism, and mechanical powers.

Heat is studied during one term of the Sophomore year as being essential to the engineering and scientific courses, while in the Senior year electrical engineering is taught.

Text and Reference Books: Worthington's Physical Laboratory Practice, Meyer's Experiments in Light and Sound, Pickering's Physical Measurements, Olmstead's Natural Philosophy, Tyndall on Light, Sound and Heat, Larden's Heat, Stewart's Heat, Sylvanus Thompson's Electricity, Day's Electric Light Arithmetic, Day's Exercises in Electrical Measurements, Murdock's Notes on Electricity and Magnetism, Kempe's Hand Book of Electrical Testing, Ganot's Physics.

PSYCHOLOGY, ETHICS AND POLITICAL ECONOMY.

PRESIDENT.............

PSYCHOLOGY AND ETHICS.

These important studies are taught inductively, no theory or doctrine being urged for acceptance which is not based upon a philosophical induction from the facts of consciousness. The student is taught to subject every statement of fact or principle to the test of his own experience. The fullest and freest discussion of opposing views is encouraged.

POLITICAL ECONOMY.

The aim is to give a succinct statement of the undisputed principles of political economy, and to discuss conflicting views with all possible fairness.

TEXT AND REFERENCE BOOKS.

Psychology—Bascom, Mahan, Porter, Sir William Hamilton.
Ethics—Alexander, Dagg, Bascom, Porter, Calderwood.
Political Economy—Chapin, Mill, Say, Perry.

ANCIENT LANGUAGES.

PRESIDENT..............

PROF. WILLIS.

The subjects taught in this department are the Latin Language and Literature and the History of Rome, the Greek Language and Literature and the History of Greece. Authors are read in the order of their difficulty, and neat written translations are required at stated intervals. The grammar and idioms of these languages are carefully studied and compared with those of English and other languages.

Marked attention is paid to the rendering of English into Latin and Greek. In the lower classes the best manuals for Latin and Greek composition are used; for the higher classes carefully graded exercises are prepared by the professor.

Due prominence is given to the study of the Latin and Greek metres. The grammars are made the basis of this instruction, but fuller explanation is given in lectures.

For admission into the Freshman Class, students should be able to read at sight and parse any passage in two books of Cæsar; must know thoroughly all the declensions and conjugations, regular and irregular, of the Latin Grammar and the elementary principles of Syntax; and should be able to translate easy sentences from English into Latin.

No Greek is required, at present, for admission.

LATIN.

Freshman Class—Gildersleeve's Grammar, Jones's Latin Prose Composition, Cæsar (Greenough or Kelsey) 2 Books, or Nepos (C. & S.) 35 pages, Virgil (Greenough) 3 Books of Aeneid and Selections from Eclogues, Pennell's or Smith's Smaller History of Rome.

Sophomore Class—Gildersleeve's Grammar, Jones's Prose Composition, Cicero's Orations (Harkness) 50 pages, Odes of Horace (MacLeane), Livy (Lincoln) 50 pages.

Junior Class—Harkness' Grammar, Prose Composition, Livy 60 pages, Satires and Epistles of Horace (1500 lines) Tacitus (100 pages).

Senior Class—Harkness' Grammar, Original Exercises, Cicero's Moral Works, Terence, Juvenal (Leverett or MacLeane), Roman Literature.

Books of Reference.—Harper's Latin-English Lexicon, White's English-Latin Lexicon, Classical Dictionary, Classical Atlas, Zumpt's, Madvig's and Roby's Latin Grammars.

Other authors may occasionally be substituted for those above when a change seems beneficial: (*e. g.*) Sallust, Ovid, Catullus, Tibullus, Propertius, Pliny, Plautus.

GREEK.

Freshman Class.—Goodwin's Grammar, Whiton's Lessons, Xenophon's Anabasis (Goodwin) 6 Chapters.

Sophomore Class.—Goodwin's Grammar, Jones's Prose Composition, Xenophon's Anabasis 3 books, Lysias 3 Orations, History of Greece.

Junior Class.—Goodwin's Grammar, Jones's Prose Composition, Herodotus (Mather) 40 pages, Homer's Iliad (Pratt and Leaf) 3 Books, Demosthenes 40 Pages, Plato.

Senior Class.—Goodwin's Grammar, Original Exercises, Thucydides 1 Book, Euripides 1 Play, Sophocles 2 Plays, Greek Literature.

Books of Reference.—Liddell and Scott's Greek-English Lexicon (7th Oxford Edition), Yonge's English-Greek Lexicon, Classical Dictionary, Classical Atlas, Goodwin's Moods and Tenses, Hadley's or Curtius's Grammar.

NORMAL COURSE.

PROFESSOR HOWELL.

The design of this course is to train teachers for the schools of the State. The instruction is so co-ordinated to both the Preparatory and Collegiate Departments as to make its benefits accrue to all grades of teachers, from the primary teacher to the college professor. Considerable class practice and observation work are given throughout the course. The aims are:

1. To lead pupils to think and investigate for themselves.

2. To train them in the best methods of imparting instruction without destroying their individuality.

3. To teach them how to organize, grade and discipline the various kinds of schools.

4. To give them a knowledge of school law, and especially of the duties of teachers as officers of the State.

5. To impart to them a valuable summary of the history of education.

6. To teach them the fundamental principles of Psychology and of the science of human conduct.

Text and Reference Books: Baldwin's and Kellogg's School Management, Parker's Talks on Teaching, Hewett's Pedagogy, The Practical Teacher, Volume VIII, Swett's Methods, Thring's and Page's Theory and Practice of Teaching, Rosenkranz' Philosophy of Education, DeGraff's School-Room Guide, Bain's Education as a Science, Wickersham's School Economy and Methods, Painter's History of Education.

PREPARATORY STUDIES.

Students are not admitted into the lowest Preparatory class until they are thoroughly familiar with the fundamental operations of Arithmetic, viz.: Addition, Subtraction, Multiplication and Division. In Reading, they must be able to understand and intelligently render specimens of the grade of the Fourth Reader; must have a knowledge of Primary English Grammar, Primary Geography, the rudiments of Penmanship, and the spelling of ordinary words of the grade of the Fourth Reader.

Much importance is attached to Mental Arithmetic as a means for developing the power of Analysis and for strengthening the mind. Both oral and written exercises are required daily.

Daily exercises in Penmanspip are required.

In the A Class, Geography is taught during the first term and United States History during the second and third terms. Latin is begun by those who propose a Classical Course or the complete Normal Course.

Classical students are thoroughly drilled in the elements of Latin Grammar and are carried through a Reader and two books of Cæsar, or the equivalent, by the close of the Sub-Freshman year. Students are exercised by frequent translations from English into Latin.

Algebra and Geometry are begun in the Sub-Freshman year. In the former students are thoroughly drilled in the elementary principles and required to master everything to equations of the second degree. In the latter three books are studied during the year.

Free-Hand Drawing forms a part of the regular curriculum and is begun in the A class. Drawing has a disciplinary, as well as a practical value, and also tends to refine the taste and polish the mind.

Elementary Science is taught throughout the Sub-Freshman year. The experience of the past two sessions in giving instruction in this line of study has been most satisfactory. The classes have been taught by the Professor of Chemistry and Biology, who has sought to give such an outline of scientific facts and principles as would prove valuable both to those students who propose to take a fuller course, and to the larger number who drop out of school before reaching the Collegiate Department.

Text Books.—Barnes' New National and Swinton's Readers, Ray's Practical Arithmetic, Thompson's Mental Arithmetic, Barnes' Higher Arithmetic, Mitchell's New Intermediate Geography, Barnes' United States History, Greene's Grammars and Analysis, Chittenden's Composition, Robinson's Algebra, (Wentworth's for reference) Wentworth's Geometry, Gildersleeve's Latin Grammar, Jones's First Lessons in Latin, Gildersleeve's Latin Reader.

MUSIC DEPARTMENT.

MISS KING.

PIANO FORTE.

This course will require six years for completion. Should the pupil possess marked talent and unceasing energy, it may be finished in less time.

FIRST YEAR.

Studies of the first principles of music, five-finger exercises, movement, scales, and such studies as will prepare the pupil for light classic composition of the Old Masters.

SECOND YEAR.

Practical exercises of Duvernoy, Czerny and Bach; introduction of such new movements of Liszt and Chopin as will prepare the pupil for work exclusively classic.

THIRD AND FOURTH YEARS.

Studies of Clementi, Heller and Bach, with especial attention to touch; introduction of more advanced movements of Liszt, that the pupil may be enabled to contend successfully with the moderately difficult classic composition.

FIFTH AND SIXTH YEARS.

Advanced studies of Beethoven, Clementi and Cramer, and difficult compositions of Schumann, Liszt, Chopin, Hayden, etc.

VOCAL CULTURE.

FIRST YEAR

Will be devoted exclusively to forming of register and to producing evenness and natural tones of voice in register. Bassini's Art of Vocalization will be the theory used.

SECOND AND THIRD YEARS.

Pronunciation, timbre, science and art of breathing (diaphragm and clavicular), and art of phrasing; studies of Conconi and Bassini, with light selections from the Operas.

FOURTH AND FIFTH YEARS.

Colature, Messa di Voco, Portamento, and other vocal embellishments; students of Garcia, Conconi, Rossini, etc., with the more difficult selections from the operas and classic composition of Mendelssohn and others.

SIXTH YEAR

Will embrace the first course in Opera Dramatic.

VIOLIN.

FIRST YEAR.

Practice of bowing, finger exercises, Manzas' Instructor.

SECOND YEAR.

Etudes of Dancla and arrangements from the operas.

THIRD YEAR.

Kaiser's Etudes, Sonatas by Hayden, Schubert, etc.

FOURTH YEAR.

Krautzer's Etudes and compositions by De Beriot, Kreutzer, etc.

TERMS.

ONE LESSON PER WEEK.

Piano forte	$6 00	per term.
Voice Culture	6 50	"
Violin or Guitar	6 00	"
Thorough Bass and Harmony	5 50	"

Theory and Composition	7 50	“
Use of Piano one hour every day	2 35	“

For two lessons per week the rates are double the above, except for the use of piano.

One-half of tuition must be paid in advance, balance at end of term.

No deductions will be made on account of absence from recitations except in cases of prolonged sickness; then the loss will be shared equally between student and teacher.

By a resolution of the Board of Trustees, at its recent meeting, the students of the Music and Art Departments, who have not matriculated in other departments, will hereafter be required to matriculate and pay the usual fees, and to be subject to the regulations applicable to other students.

ART DEPARTMENT.

The Young Ladies' Industrial Art Studies embrace drawing, designing, modeling, working in wood, metal, clay and other substances. They teach the art of producing an infinite variety of objects, both useful and ornamental; in short, *whatever lies at the foundation of the industries dependent alone upon human invention, skill and handiwork.*

There has been excellent progress during the past two sessions in drawing, designing, embroidery, brass-work, and wood-work; and the young ladies begin to appreciate the importance of training the eye and hand in working material things for pleasure and profit.

Fine Art Studies will constitute hereafter an optional course to be paid for at the teacher's rates. These studies will embrace charcoal outlining and crayoning, painting in oil and water colors, and other forms of decorative art.

MILITARY DEPARTMENT.

The military officers of the University consist of the President, Commandant and such assistant professors as may be assigned to duty in this department by the President. The President is head of the department, and issues from time to time such general and special orders as he deems necessary to the efficiency of the military exercises and to the enforcement of order in the buildings and on the grounds.

This department is designed to impart to each male student not physically incapacitated to bear arms, theoretical and practical instruction in the school of the soldier, of the company, and of the batallion, and thereby furnish the State with a body of young men qualified to organize its militia.

Besides, the military drill is a superior health-giving exercise, and promotes physical development, manly carriage, neatness, precision, order, and a habit of obedience, which is a valuable aid in the enforcement of discipline.

The entire body of male students is divided into companies, which are officered by cadets, selected for proficiency in drill, good deportment and scholarship. The cadet officers are regarded as assistants in the enforcement of discipline, and their orders, while on duty, are considered as duly authorized, and must be obeyed accordingly.

Cadet officers are expected and required to be examples in Military deportment and general good conduct.

A neat uniform, with brass buttons and suitable trimmings, is required to be worn by all males.

Parents and guardians will save money by postponing the purchase of winter suits for their children and wards until they arrive at Fayetteville.

At the competitive drills during Commencement Week, "B" Company won the honor of carrying the Battalion Colors during the session of 1887–88, and the Cadet Officers, of the Battalion presented a gold medal to Cadet Wallace Oliver for being the best drilled private.

OFFICERS OF THE BATTALION.

J. M. WHITHAM, *Colonel.*

GEO. C. SCHOFF, *1st Lieutenant and Adj.*

W. N. CROZIER, *1st Lieutenant and Q. M.*

H. J. HALL, *1st Lieutenant.*

G. A. HUMPHREYS, *Sergeant-Major.*

"A" COMPANY.

G. A. WARREN, *Captain.*

M. DANAHER, *1st Lieutenant.*

P. BOWLES, *2nd Lieutenant.*

D. C. B. AIKIN, *1st Sergeant.*

A. G. TAFF, *2nd Sergeant.*

W. T. GUNTER, T. V. BRUCE AND A. WEBB, *Corporals.*

"B" COMPANY.

J. H. HOBBS, *Captain.*

LEE TREADWELL, *1st Lieutenant.*

N. F. DRAKE, *2nd Lieutenant.*

J. C. MCNEELY, *1st Sergeant.*

L. F. FISHBACK, *2nd Sergeant.*

A. S. BROWN, W. L. BLANKS, P. J. PARK, *Corporals.*

COLOR GUARD.

J. A. Taff, *Color Sergeant*; H. E. Williams, J. N. Wheeler, J. R. Ganaway, *Corporals.*

BAND.

R. L. Rutherford, *Drum-Major;* W. W. Powell, *Leader;* W. E. Dickson, Wm. Bates, F. O. Robertson, M. L. Hulse, C. E. Faulkner, A. W. Shreve, R. D. Harris, T. C. Greene, R. L. Wade, E. L. Parker, *Members.*

Prof. Whitham will remain Colonel of the Battalion until relieved by an officer to be detailed from the United States Army as Commandant of Cadets.

DISTINCTIONS

CONFERRED AT COMMENCEMENT, JUNE 9, 1887.

Upon the recommendation of the Faculty, the Board of Trustees conferred the following degree:

Licentiate of Instruction—Hubert J. Hall and J. H. Taff.

The following students were awarded diplomas in the business course:

S. A. Horton, H.V. Cassaday, J. L. Turner, Storer Leverett, F. W. Greene, E. F. Saxon,Lula M. Wines, Elmer L. Parker, W. O. Bray, C. F. Bush, Annie Duke.

A gold medal offered by the Faculty for the best debater of the Junior Class was awarded to Lee Treadwell.

By invitation of the Faculty, Rev. H. R. Withers, D. D., Hot Springs, deliverd the Baccalaureate sermon on Sunday, June 5, and Hon. G. W. Caruth, Little Rock, the annual address on Thursday, June 9.

GENERAL INFORMATION.

LOCATION.

The Arkansas Industrial University is located within the corporate limits of the town of Fayetteville, Washington county. The location is thought to be unsurpassed by any other locality in the State in salubrity of climate, beauty of surrounding scenery, fertility of soil, variety and perfection of agricultural and horticultural productions, and in the morality and intelligence of its people.

PROPERTY.

The property of the University consists of the proceeds of the munificent grant of land by Congress, the bonds of Washington County, and of the town of Fayetteville, the appropriations made by the State, and the University farm and lands—amounting in all to $300,000 in value.

The Main Building is one of the most magnificent structures of the kind in the South. A cut of it and a brief description can be seen on the second page of this catalogue.

The New Dormitory, which is to be constructed according to excellent plans and specifications recently approved by the Board of Trustees, will probably be completed by the close of the first term.

ACCESSIBILITY.

Students may reach Fayetteville from both the north and the south by daily trains on the Arkansas branch of the St. Louis & San Francisco Railroad, which now connects on the south with the Little Rock & Fort Smith Railroad at Van Buren.

Students, on arriving at Fayetteville, must report at once to the President of the University. No student will be allowed to recite in any class until properly enrolled, but will be held responsible for his conduct from the time of his arrival in Fayetteville.

WITHDRAWAL OF STUDENTS.

Parents, or guardians, who wish to withdraw their children or wards from the University, should write to the President of the Faculty, stating their wishes. Unworthy students sometimes deceive the Faculty by pretending that their parents desire them to return home. No honorable discharge will be given to a student under age, who is unable to produce the written application of his parent or guardian for his withdrawal, or if his number of demerits shall exceed the proportion of two hundred allowed during the session. Nor will an honorable discharge be given to a student, under censure of any kind, whether for neglect of duty, or other cause, even though he may have the consent of his parent or guardian for his withdrawal from the University.

BOARDING HOUSES.

Students are required to board at such places as are approved by the Faculty, and are under the supervision of the President of the University. No change of boarding house will be allowed, except at the end of each term, unless under extraordinary circumstances, nor without the permission of the President.

If at any time the influence of a boarding house be found pernicious, boarders will be removed at the instance of the Faculty.

EXPENSES.

Board, including fuel, lights and washing, may be had with families living in or around Fayetteville at from $12 to $16 per calender month. Day boarding is sometimes obtained at from $8 to $10 per month.

In order to lighten the expenses of students of limited means, the Board of Trustees, two years ago, authorized the Faculty to open a boarding house on the College grounds, where good substantial fare might be furnished to from forty to fifty boys at cost. To effect this purpose, the old Refectory was thoroughly repaired, and the dining-room and kitchen furnished at the expense of the University. At the request of the Faculty, one of the professors took charge of the establishment at the opening of the first session, and another at the beginning of the second session. Under their supervision it was so conducted that good substantial table board was furnished the students for less than $8 per month. This arrangement will be continued, or some other cheap plan substituted, until the completion of the new dormitory.

Students who board on the grounds are expected to provide their own furniture, fuel and lights. Before entering the boarding house they are required to promise to conform to such regulations as to study, the preservation of order, visiting, leaving their quarters, and the care of their rooms, as may be prescribed by proper authority.

Tuition charges for students who have not Beneficiary appointments, have been reduced to $10 per session of forty weeks.

All *new* students, on entering, are required to pay a matriculation fee of $5.

No student will be enrolled until all fees are paid, and no tuition fees will be refunded, except in cases of sickness causing continuous absence of not less than six weeks.

POCKET MONEY.

The Faculty would advise parents to allow their sons but little pocket money. It has been well said in regard to students, that "a pocket full of money and a head full of sense are seldom found together." Money can be sent monthly for the payment of boarding and other necessary expenses. Postal orders can always be cashed at the Post Office at Fayetteville. The President of the Faculty cannot personally take charge of the personal affairs of students.

LITERARY SOCIETIES.

In the Collegiate Department there are two Literary Societies, the "Mathetian" and "Philomathean." Students who are members of the Sub-Freshman Class, are also eligible to membership in these.

Literary Societies may be organized in the Preparatory Department under proper restrictions. At present there is but one in operation, the Garland Society.

LIBRARY AND READING ROOM.

The University Library, containing nearly 3000 volumes comprises many valuable works, and additions are constantly being made. Nearly all the newspapers of the State of Arkansas, and several from other States have been generously furnished to the Library, either by the publishers or other friends of the University. The best magazines of America and some from England, France and Germany are also purchased. All these are kept on file in the Library, and students have access to them, as well as the books, at certain hours each day. No Library fee is charged, but a deposit of $2 is required to insure proper care of the books taken from the Library.

APPARATUS AND MUSEUM.

The University is supplied with no inconsiderable amount of apparatus for illustrating the different sciences, and for the prosecution of original work. Most of the departments are well equipped for practical laboratory and field work.

Valuable additions have been made in the last year to the chemical and physical departments. Appropriations are made by the Board of Trustees, annually, for the purchase of needed supplies.

CABINET AND MUSEUM.

The cabinet of minerals consists chiefly of a collection of State minerals, contributed by various parties of the State, and by the professors; but it has been recently enlarged by purchase, and embraces also specimens of value from other States.

It is hoped that the day is not far distant when, by exchange and purchase, the institution will secure an ample supply of specimens for the illustration of the minerals and fossils of our own and other countries.

There has been constructed an herbarium case large enough to hold the indigenous plants of North America and such exotics as are of economic value. It will be the work of years to complete a collection of the plants of North America, but the work is progressing. A valuable addition has been made by the purchase of Prof. Harvey's collection of the plants of Arkansas, embracing more than 2500 specimens.

There are about 500 species of animal specimens for illustrating the various parts of zoology.

Collections in all the departments are slowly accumulating.

Contributions of minerals, fossils, Indian relics and rare curiosities are solicited.

APPOINTMENT OF BENEFICIARIES.

All appointments should be completed, if possible, before the opening of the autumn term. The County Judges, who make the appointments, should prepare duplicate notifications of appointments, one of which should be forwarded to the President of the University, and one to the Secretary of the Board of Trustees; and in case the appointee fails to appear at the University within twenty days after an appointment (except in case of sickness), he or she will be regarded as having declined the appointment, in which case it will be the duty of the President of the Faculty to notify the person making the appointment of such failure, and he, in turn, should make another appointment as soon thereafter as possible; such other appointee being required to appear at the University as soon as possible after appointment. The President of the Faculty shall continue to notify appointing officers until their respective number of appointees make their appearance at the University.

All beneficiary students should be present at the opening of the autumn term; and unnecessary delay, either of old students returning, or new ones reporting, will lead to the forfeiture of their appointments.

QUALIFICATIONS.

The attention of County Judges is called to the fact that *no Beneficiary Students will be admitted, unless they have the following qualifications:*

Students are not admitted uniil they have become familiar with the fundamental principles of arithmetic, viz.: addition, subtraction, multiplication and division. In reading, they must be able to understand and intelligently render specimens of the grade of the Fourth Reader, must have a knowledge of primary English grammar, primary geography, the rudiments of penmanship, and the spelling of ordinary words of the grade of the Fourth Reader. These qualifications are the test of admission at the beginning of the session; those applying later will be admitted only on the grade of the class.

APPOINTMENTS.

As much trouble and annoyance is caused by students who have been appointed as Beneficiaries, coming without any evidence of appointment, the following are adopted as the proper forms of notice to be given by the Judge of County Court to the President of the University and the Secretary of the Board of Trustees, upon the appointment of Beneficiary Students by the County Court, or the Judge thereof, in accordance with the sixth section of an Act, approved March 6, 1875.

[*Form* 1.—*Appointment.*]

No............ [To be given to the Student.]

To whom it may concern :

I hereby appoint.......... ....of......................... County, State of Arkansas, as a beneficiary, to the Arkansas Industrial University.

Given under my hand, this...... .....of...........188....

....

Send a notice like the following to the President of the University, and one to the Secretary of the Board of Trustees at Fayetteville.

[*Form* 2.—*Notice to President of the University.*]

.................................Arkansas.
....

To the .... *University*:

I hereby notify you that I have this day appointed......................
..........................of....................County, State of Arkansas, a Beneficiary to the Arkansas Industrial University.

Given under my hand, this..................day of....................
188....

....

BENEFICIARIES.

The Board of Trustees have provided that the number of Beneficiaries shall be limited to one thousand to be distributed to the counties of the State in proportion to population of 1880, and that in every case, where a county fails to supply its quota of Beneficiaries the Governor shall be authorized to appoint such Beneficiaries to the full number authorized by law, provided that such appointment may be vacated on an application from the county so failing to fill its quota, but may be resupplied from some other county whose quota has not been filled. [See table].

COUNTIES.	Beneficiaries	COUNTIES.	Beneficiaries
Arkansas	10	Lee	16
Ashley	13	Lincoln	12
Baxter	7	Little River	6
Benton	24	Logan	19
Boone	15	Lonoke	15
Bradley	8	Madison	15
Calhoun	7	Marion	10
Carroll	16	Miller	12
Chicot	12	Mississippi	9
Clay	13	Monroe	12
Clark	15	Montgomery	7
Cleburne	8	Nevada	17
Cleveland	10	Newton	6
Columbia	19	Ouachita	15
Conway	16	Perry	3
Craighead	8	Phillips	26
Crawford	11	Pike	8
Crittenden	11	Poinsett	3
Cross	6	Polk	7
Dallas	9	Pope	19
Desha	11	Prairie	10
Drew	15	Pulaski	43
Faulkner	17	Randolph	15
Franklin	18	Saline	12
Fulton	8	Scott	11
Garland	11	Searcy	9
Grant	8	Sebastian	27
Greene	9	Sevier	8
Hempstead	24	Sharp	12
Hot Spring	10	Stone	8
Howard	12	St Francis	10
Independence	21	Union	16
Izard	14	Van Buren	11
Jackson	15	Washington	30
Jefferson	29	White	21
Johnson	15	Woodruff	12
Lafayette	6	Yell	18
Lawrence	10		

There is also one "Honorary Scholarship" to each county, to be selected for superior merit and proficiency from the Public Schools of each county, according to Section 2, of Act July 23, 1868.

SALE OF ARDENT SPIRITS NEAR THE ARKANSAS INDUSTRIAL UNIVERSITY.

By an Act of the General Assembly of the State of Arkansas, approved March 6, 1875, it is unlawful for any person to sell or give any vinous or ardent spirits within three miles of the Arkansas Industrial University, unless it be prescribed by a regular practicing physician for medical purposes.

Application for catalogue or blanks for Beneficiary Appointments should be addressed to Col. J. L. Cravens, Secretary, Fayetteville, Ark.

CALENDAR---1887-'88.

The Fall Term begins Monday, September 5, 1887.

The Fall Term ends Friday, December 2, 1887.

Spring Term begins Monday, March 5, 1888.

Spring Term ends Monday, June 4, 1888.

Summer Term begins Monday, June 4, 1888.

Summer Term ends Monday, September 3, 1888.

[At this time the present Senior Class will be graduated.]

The Fall Term begins Monday, September 3, 1888.

The Fall Term ends Thursday, December 6, 1888.

From the above it may be seen that hereafter the vacation will be in the winter. This arrangement affords students from malarious districts an excellent opportunity to spend the summer at school in the mountains, and enjoy the winter vacation at home without endangering their health.

ALUMNI OF THE ARKANSAS INDUSTRIAL UNIVERSITY.

CLASS OF 1875.

Botefuhr, Laura D. (Mrs. Schulte, Fort Smith, Ark., Student of music in Cincinnati, Ohio.)........Fayetteville, Ark
Carson, Ann E........Jonesboro', Ark
Carson, Augusta O. (Mrs. Thomas Cline.)........Jonesboro', Ark
Davis, Lizzie P. (Teacher, Los Angelos, Cal.)........Bentonville, Ark
McCart, Eva (Kansas)........Fayetteville, Ark
McKinney, Chas. F. (Commercial Traveler)........Ozark, Ark
Moore, Lucy J. (Mrs. Ross, Cincinnati, Ark.)........Fayetteville, Ark
Putman, Anna (Teacher in Public School)........Fayetteville, Ark

1876.

Barnett, Nettie (Mrs. C. Boles)........Fayetteville, Ark
Neal, Wm. H........Van Buren, Ark
Taylor, E. L. (Teacher)........Van Buren, Ark
Gorton, Bell L. (Teacher)........Aurora, Ill
Gregg, Alfred W. (deceased)........Fayetteville, Ark
Harris, Agnes (Mrs. Johnson, of Kansas City)........Fayetteville, Ark
Harris, Sallie E. (Mrs. C. P. Conrad, for several years Professor in A. I. U.) Kansas City
Johnson, Albert P. (Lawyer, Winfield, Kansas).....Wesley, Madison County, Ark
Waggener, W. J........Farmington, Washington County, Ark

1877.

Borden, Alice........Fayetteville, Ark
Hawkins, J. T........Mount Holly, Union County, Ark
Jennings, Edgar........Fayetteville, Ark
Massic, Collin, (Teacher and Minister)........Charleston, Ark
Walker, J. V. (Prosecuting Attorney)........Fayetteville, Ark
Watson, Charles A. (Lawyer and Minister)........Washington County, Ark
Carden, E. B........Bloomer, Sebastian County, Ark
Mellette, W. M. (Lawyer)........Fort Smith, Ark
Simms, W. D........Bentonville, Ark

1878.

Blakely, Nora, (Mrs. H. M. Hudgins, Hot Springs)........Fayetteville, Ark
Gregg, Andrew S., (Physician)........Fayetteville, Ark

Pettigrew, Thos. A., (Lawyer)...... ....Charleston, Franklin County, Ark
Reed, Maggie, (Mrs. P. A. Crawford)..........................Fayetteville, Ark
Sutton, Wm. S., (Supt. High School, Houston, Texas)...........Fayetteville, Ark

1879.

Butler, H. M., (Poet and Teacher,)...........Varner Station, Lincoln County, Ark
Floyd, J. C., (Lawyer, Yellville, Ark.,)........................Bentonville, Ark
Harrod, J. H., (Lawyer, Conway, Ark.,)..........................Lonoke, Ark
Marrs, S. E., (Editor Democrat,)..........Viney Grove, Washington County, Ark
Marshall, J. C., (Member Legislature,)...............Avoca, Benton County, Ark
Patton, Alice, (Teacher in California,)......Viney Grove, Washington County, Ark
Teague, C. V., (Lawyer, Hot Springs, Ark., County Judge of Garland County, Ark.)....................................Toledo, Dorsey County, Ark
Wood, C. D., (Judge Circuit Court, Monticello, Ark.,) Hamburg, Ashley County, Ark

1880.

Kitchens, T. B.............................Jonesboro, Craighead County, Ark
Langford, W. H. (Merchant, Pine Bluff)..........El Dorado, Union County, Ark
Russell, Lawrence (Lawyer, Russellville, Ark.).....Russellville, Pope County, Ark
Droke, G. W. (Teacher, A. I. U.)...........................Bentonville, Ark
Ross, T. C. (Lawyer and Real Estate Agent, Fort Worth, Tex.)....Fort Smith, Ark
Johnson, T. M..................................Wesley, Madison County, Ark
Tillman, J. A. (County Clerk, Washington County, Ark.)........Fayetteville, Ark
Williams, Naomi J. (Teacher).......................Washington County, Ark
King, Artelee Alice.............. ....Fort Smith, Ark
Patton, Mattie J. (Student C. L. S. C. Siloam Springs), ...Viney Grove, Washington County, Ark

1881.

Carnall, Ella (Teacher).... .... Fort Smith, Ark
Ellis, F. W. (U. S. Signal Service, Washington, D. C.)..........Fayetteville, Ark
Moore, J. I. (Lawyer, Helena, Ark)..............Vineyard, Phillips County, Ark
Reed, Lina (Artist) ....Fayetteville, Ark
Reiff, O. S. (Lawyer, Fort Smith)....................Magazine, Logan Co., Ark
Watson, J. J. (in Australia)...............................Fayetteville, Ark

1882.

Brown, W. D. (Physician)......................................Newtonia, Mo
Booth, W. P...................................... ....Batesville, Ark
Carrigan, A. H. (Lawyer)................... Washington, Hempstead, Co., Ark
Chanslor, C. K. (Civil Engineer in Oregon)...........Washburne, Barry Co., Mo
Cherry, W. R. (Lawyer in Texas).............Patterson's Bluff, Franklin Co., Ark
Gregg, L. W. (Lawyer).......................................Fayetteville, Ark
Hon, Daniel (Deceased)......................... Waldron, Scott Co., Ark
Jones, Gustave (Teacher, Marysville, Mo.)....................Jacksonport, Ark

Lanier, J. A. M., (Teacher, Mountain Home, Ark.—married)	Mountain Home, Baxter Co., Ark
McDonough, J. B. (Lawyer, Fort Smith—Representative in Legislature)	Bloomer, Sebastian Co., Ark
McFarlane, R. W. (Lawyer and Editor, Greenwood)	Enterprise, Sebastian Co., Ark
Oates, T. F.	Russellville, Pope Connty, Ark
Pickel, J. W. (Lawyer)	Mulberry, Franklin County, Ark
Rogers, P. A	Spavinaw, Benton County, Ark
Shell, G. C. (Lawyer, Lake Village, Chicot County)	Augusta, Woodruff County, Ark

1883.

Bates, C. O (Teacher and Student of Law, University of Michigan.)	Cincinnati, Washington County, Ark
Cravens, Jessie (Teacher and Artist)	Fayetteville, Ark
England, W. W. (Teacher)	Evansville, Washington County, Ark
Greaves, C. D. (Lawyer)	Hot Springs, Ark
Mayes, J. F. (Tie Man)	Fayetteville, Ark
Stroup, Henry (Editor)	Webb City, Franklin County, Ark
Taliaferro, Lou (Teacher)	Bentonville, Ark

1884.

Anderson, L. S, (Lawyer, Washington, D. C.)	Herndon, Craighead County, Ark
Duncan, W. H. (Lawyer)	Conway, Faulkner County, Ark
Edmiston, W. L. (Teacher Public Schools, Ft. Smith, Ark.)	Springfield, Mo
Gates, D. A. (Lawyer and Editor)	Tillar Station, Drew Co., Ark
Goodwin, W. P	El Dorado, Union Co., Ark
Hillis, E. W.	Jonesboro', Craighead Co., Ark
Hudson, J. H	Dardanelle, Yell Co., Ark
Lake, Ella (Teacher of Music, Boonsboro)	Viney Grove, Washington Co., Ark
Reed, G. M. W., Jr. (Lawyer)	Fayetteville, Ark
Taff, J. L. (Teacher, Austin, Tex.)	Waldron, Scott Co., Ark

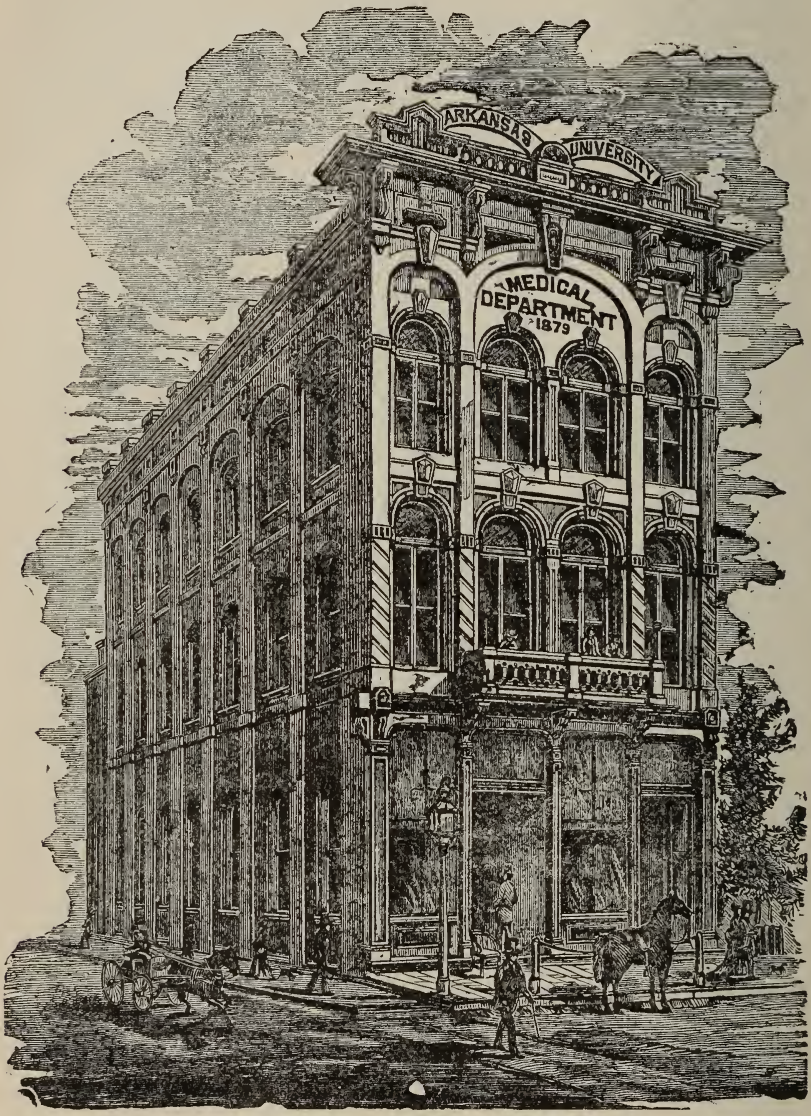
1885.

Hart, J. C. (Lawyer, Dardanelle)	Dardanelle, Yell Co., Ark
Howell, J. W. (Clerk, House of Representatives)	Clarksville, Ark
Kinsworthy, E. B. (Teacher)	Black Colony, Sevier Co., Ark
Notrebe, E. P. (Physician in Mississippi)	Sarassa, Lincoln Co., Ark
Woodall, W. H. (Teacher)	El Paso, White Co., Ark
Woolverton, C. D. (Teacher)	Center Ridge, Conway Co,, Ark

1886.

Bates, J. H. (Teacher, Lawyer, Tex.)	Cincinnati, Washington Co., Ark
Leverett, Mary (Teacher, Oxford, Miss.)	Fayetteville, Ark
Middleton, Mai (Teacher, Fort Smith)	Fayetteville, Ark
Mulholland, Sarah (Book-Keeper)	Fayetteville, Ark
Tillar, B. J. (Law Student, Little Rock)	Tillar Station, Drew Co., Ark

☞It has been impossible to obtain information as to the present address and occupation of some of the alumni, and there are probably many errors in what is stated above. It is therefore requested that all alumni or other persons who can correct or add to the above, will write at once to the Secretary of the Faculty, giving the desired information.


ARKANSAS UNIVERSITY
MEDICAL DEPARTMENT
1879

MEDICAL DEPARTMENT.

The Trustees of the Arkansas Industrial University, in the Spring of 1879, deemed it expedient to establish a *Medical Department*, to be located at Little Rock, the capital of the State. The organization was accordingly at once perfected, a full corps of professors secured, and the First Annual Announcement of a course of Medical lectures, to commence Oct. 7, 1879, was issued to the public.

Since this date, an annual course of medical lectures, beginning early in October, and continuing five months, has been given at the Medical College building, situated on Second, between Main and Louisiana streets, Little Rock.

The medical gentlemen comprising its Faculty, are all men of acknowledged ability and standing in their profession, and have been untiring in their efforts to advance the interests of this department.

The growth of this branch has been gradual and natural, the session of 1879 and 1880 having twenty-two matriculates, and one graduate, who had previously attended a course of lectures at another institution, while the Eighth Annual Session (1886 and 1887) had 61 matriculates and 15 graduates.

The College building is a very imposing three-story structure, composed of stone and brick, and very conveniently located. It contains two general lecture halls, and a very large, well-ventilated dissecting-room, well provided with all the improved conveniences for obtaining a thorough and complete practical knowledge of the anatomy of the human body.

The College is also well provided with the necessary charts, models, apparatus, etc., for illustrating each particular subject practically to the eye as well as to the ear of the student. The supply of dissecting material is ample and at a mere nominal cost—the State having made liberal provision in this particular.

The *Clinical* instruction in this Institution is very extensive, embracing almost every disease known to prevail, and every class of accident liable to occur. These are always practical and afford superior advantages to students and practitioners to obtain an ocular demonstration of diseases, accidents and their treatment.

The *Ninth Annual* Session will commence on Wednesday, October 5, 1887, and continue five months.

For special Catalogue or other information apply to

R. G. JENNINGS, M. D.,
Secretary of Faculty, Little Rock, Ark.

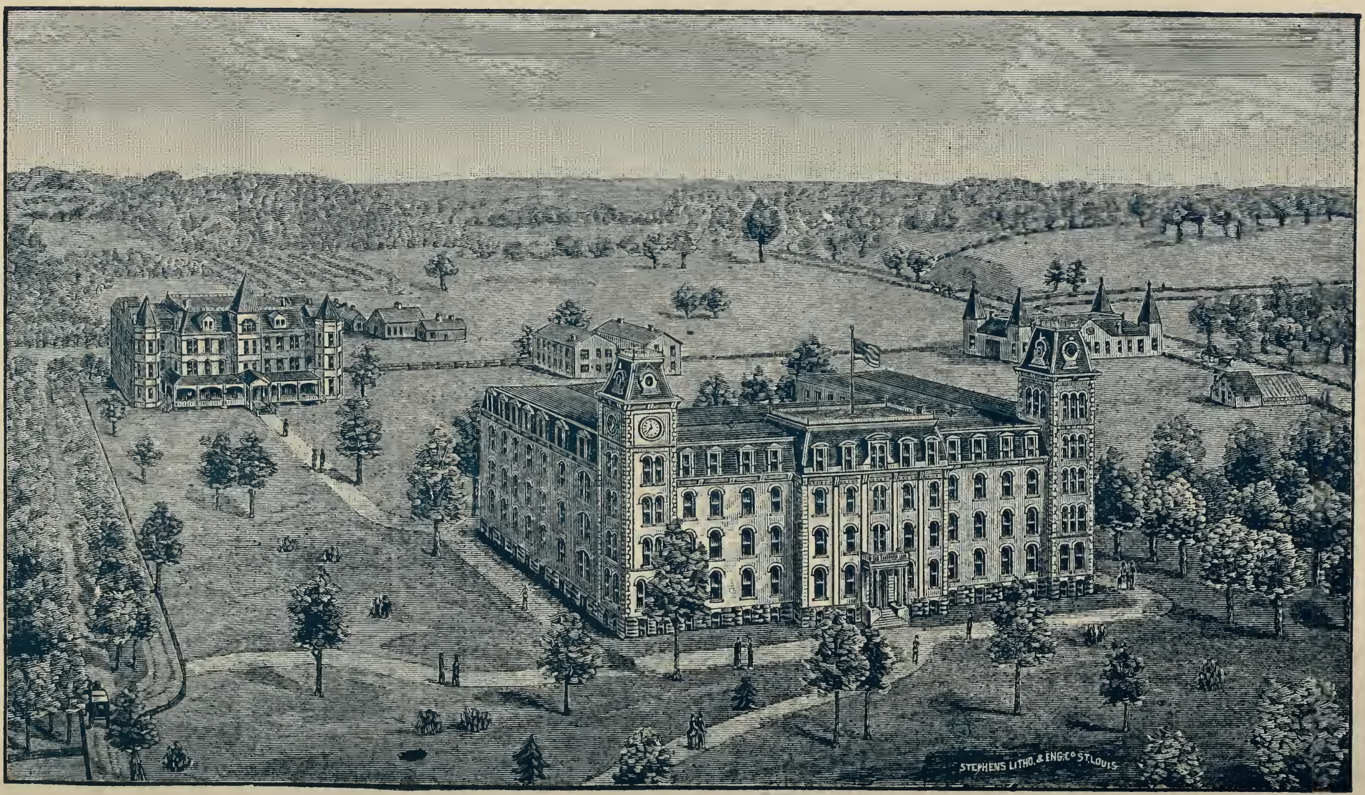
BRANCH NORMAL SCHOOL

AT PINE BLUFF.

This Branch of the Arkansas Industrial University was established by the General Assembly for the purpose of securing an adequate supply of properly trained teachers for the Public Colored Schools of the State. Its terms, course of study, sessions, etc., correspond with those of the former Normal Department of Fayetteville, and each County Judge is entitled to appoint as many colored beneficiaries to the Institution at Pine Bluff as his county is allowed under the apportionment to send white ones to Fayetteville; consequently the two classes of appointments do not interfere with each other. The expenses of a student at Pine Bluff, for board and washing, need not exceed $12 per month, and a number of those who have heretofore attended have managed to reduce their expenses very materially by labor.

For further information address the Principal,

PROF. J. C. CORBIN,
PINE BLUFF, ARK.


STEPHENS LITHO. & ENG. Co. ST. LOUIS

SIXTEENTH CATALOGUE

OF THE

ARKANSAS

INDUSTRIAL UNIVERSITY

Fayetteville, Washington Co., Ark.,

FOR THE

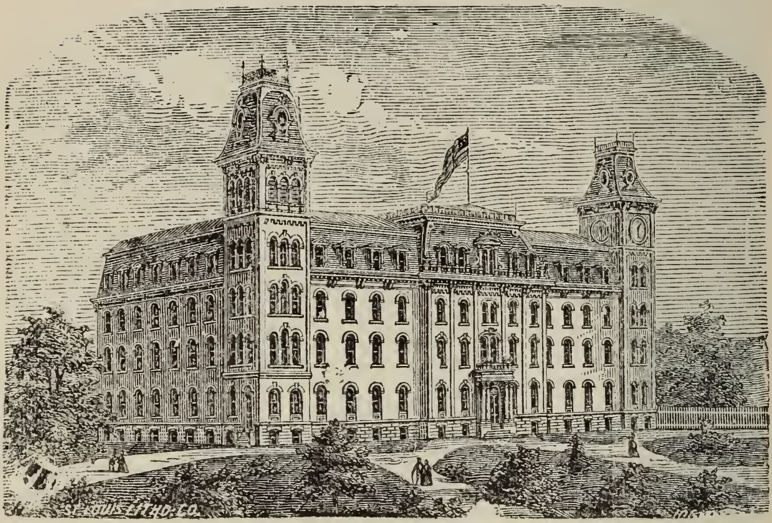
YEAR ENDING SEPTEMBER 3, 1888,

AND

ANNOUNCEMENT FOR 1888-89.

LITTLE ROCK, ARK.
PRESS PRINTING COMP'Y
1888.

UNIVERSITY BUILDINGS.


ST. LOUIS LITHO. CO.

The main University Building is a magnificent structure of brick, three stories in height, with a stone basement and mansard roof. It occupies three sides of a quadrangle and has a frontage of 214 feet.

In the north wing are situated the Chapel on the first floor, the Library on the second, and the Art Room on the third; in the south wing, the Work Shop and Engine Room in the basement, the Preparatory Hall on the first floor, the College Hall and Drafting Room on the second and the Museum on the third.

The main front of the building is divided into offices, recitation rooms and laboratories. The offices of the President and the Commandant, and the rooms of the Preparatory and Musical Departments are on the first floor, the Departments of Mathematics, Engineering and Physics, Ancient and Modern Languages and Pedagogics have convenient rooms on the second floor. while the Departments of Agriculture and Chemistry and Biology and Geology are accommodated on the third floor. Above, on the fourth floor, are the commodious and well-furnished halls of the Literary Societies.

This building covers an area of 26,108 square feet and contains *seventy* rooms, together with broad corridors and ample stairways. As a safeguard against fire and to insure a uniform temperature, the entire structure is heated throughout by steam.

The new Dormitory, in accordance with legislative enactment, was erected by the Board of Trustees in 1887, and opened to the use of students in the spring of 1888.

It is a substantial brick building three stories high, containing over forty rooms. In finish and appearance, both externally and internally, it is a model structure. The rooms are large, airy, well ventilated and lighted, and open into broad corridors extending lengthwise through the building. The entrances are five in number, three in front which open onto a broad veranda, and two in the rear. As to location and drainage, every precaution has been taken to insure good health to its occupants. That proper care may be exercised a member of the teaching body resides here with his family, and the University Faculty make a regular tour of inspection, In this building the *electric light* has been substituted for kerosene lamps and the damage from explosions is thus eliminated.

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Little Rock.

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Superintendent of Agriculture, Professor of Chemistry and Mineralogy.

JULIUS FRANKLIN HOWELL, A. M.,
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Adjunct Professor of Mechanic Arts and Instructor in Mechanical Drawing.

SIDNEY SMITH TWOMBLEY, B. S.,
Adjunct Professor of Chemistry and Agriculture.

CHARLES HENDEE LEVERETT, A. M.,
Adjunct Professor of Ancient Languages.

GEORGE WESLEY DROKE. A. M.,
Assistant in Preparatory Department.

ANNA MARTHA WAGGENER,
Assistant in Preparatory Department.

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Assistant in Preparatory Department.

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Instructor in Foundry and Forging.

WILLIAM FERDINAND BATES,
Foreman of the Farm.

LEE TREADWELL,
Instructor in Field Engineering.

PHILIP HUDSON BABB,
Instructor in Wood Work.

WILLIAM NEWELL CROZIER,
Instructor in English.

Col. O. C. Gray, Prof. of Math. etc.

IDA PACE,
Instructor in English.

MICHAEL DANAHER,
Instructor in Greek.

GEORGE ALBERT WARREN,
Instructor in English.

ALICE POLSON,
Instructor in English.

JOHN HAMILTON HOBBS,
Instructor in English.

PROFESSOR EDWARDS,
Librarian.

PROFESSOR HOWELL,
Secretary of the Faculty.

MISS TAFF,
Assistant Librarian.

PROFESSOR DROKE,
Superintendent of Dormitory.

MRS. F. W. WASHINGTON,
Matron.

WILLARD FRENCH, Engineer.
WALTER WATSON McCANT, Janitor.

MEDICAL DEPARTMENT.

SESSION OF 1888-9.

LOCATED AT LITTLE ROCK, ARKANSAS.

PROFESSORS:

P. O. HOOPER, M. D.,
Emeritus, Practice of Medicine.

EDWIN BENTLEY, M. D.,
Institutes and Practice of Surgery.

JAS. A. DIBRELL, JR., M. D.,
General, Descriptive and Surgical Anatomy, and President of Faculty.

A. L. BREYSACHER, M. D.,
Obstetrics and Diseases of Women and Children.

JOHN J. McALMONT, M. D.,
Materia Medica, Therapeutics, Hygiene and Botany.

JAMES H. SOUTHALL, M. D.,
Practice of Medicine.

ROSCOE G. JENNINGS, M. D.,
Clinical Surgery and Dermatology.

W. G. MILLER, M. D.,
Medical Chemistry and Toxicology.

L. P. GIBSON, M. D.,
Demonstrator of Anatomy.

T. E. MURRELL, M. D.,
Opthalmology and Otology.

JAMES H. LENOW, M. D.,
Diseases of Genito-Urinary Organs.

CLAIBORNE WATKINS, M. D.,
Physical Diagnosis and Clinical Medicine.

LOUIS R. STARK, M. D.,
Gynæcology.

JOHN WATERS, M. D.,
Institutes of Medicine.

F. L. FRENCH, M. D.,
Prosector of Anatomy.

W. U. SIMONS, U. S. SIGNAL SERVICE,
Meteorology, etc.

J. N. Craig, Janitor, at the College, on Second, between Main and Louisiana Streets.

All communications should be addressed to

R. G. JENNINGS, M. D.,
Secretary of Faculty, Little Rock, Ark.

ARKANSAS STATE AGRICULTURAL EXPERIMENT STATION,

LOCATED AT THE ARKANSAS INDUSTRIAL UNIVERSITY.

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The Board of Control. The President of the University. The Director of the Station.

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A. E. MENKE,	Director.
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S. H. CROSSMAN,	Entomologist.
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C. B. COLLINGWOOD,	Chemist.
F. CORY,	Ass't at Pine Bluff.
R. L. MUNN,	Ass't at Jonesboro.
J. K. FITZGERALD,	Ass't at Texarkana.

CATALOGUE OF STUDENTS,

SESSION 1887-8.

COLLEGIATE DEPARTMENT.

SENIOR CLASS.

Bowles, Preston	Civil Engineering.
Crozier, William N	Classical.
Danaher, Mike	Classical.
Dickinson, W. E	Classical.
Drake, N. F	Civil Engineering.
Flynn, W. M	Classical.*
Hobbs, John H	Classical.
Pace, Ida	Classical.
Polson, Alice	Scientific.
Powell, W. W	Classical.
Schoff, George C	Civil Engineering.
Treadwell, Lee	Civil Engineering.
Warren, George A	Literary.
Total	13.

JUNIOR CLASS.

Aikin, Don C. B	Civil Engineering.
Fishback, L. F	Scientific.
Gardner, L. C	Mechanical Engineer.
Harrison, Grace	Literary.
Humphreys, G. A	Irregular.
McNeely, John C	Civil Engineering.
Slagle, Ida	Classical.
Southerland, J. W	Irregular.
Taff, A. G	Civil Engineering.
Taff, Joseph A	Civil Engineering.
Taff, Mollie	Classical.
Wade, John M	Classical.
Williams, H. E	Civil Engineering.
Total	13.

SOPHOMORE CLASS.

Bates, William R	Irregular, Agricultural.
Bruce, Thomas V	Civil Engineering.
Duncan, Robert W	Classical.

Gunter, Walker L	Classical.
Haney, William W	Civil Engineering.
Harris, Robert D	Civil Engineering.
Hervey, W. R	Scientific.
Irwin, Robert W	Civil Engineering.
Kemp, Elzie	Scientific.*
Millsaps, Nelson	Scientific
Morrow, Mattie	Scientific.
Obenshain, Ora	Scientific.
Patton, W. J., Jr	Civil Engineering.*
Pittman, Jennie	Irregular.
Reynolds, Mattie	Normal.
Shreve, A. W	Civil Engineering.
Shreve. Henry B	Civil Engineering.
Stewart, William S	Scientific.
Trott, Bertha	Irregular.
Tsuji, Taro	Civil Engineering.
Vaughan, Cordie	Scientific.
Walker, Nannie	Normal.*
Total	22.

FRESHMAN CLASS.

Arkebauer, Charles	Scientific.
Bray, W. O	Agricultural.
Bush, Charles F	Classical.
Cassaday, H. V	Classical.
Condray, William F	Normal.
Core, Elias	Normal.
Corley, E. P	Normal.
Drake, Charles H	Civil Engineering.
Duke, Annie	Scientific.
Futrall, J. C	Classical.
Gallaway, Irene	Normal.
Greene, Fred	Civil Engineering.
Horton, S. A	Normal.
Hughes, G. A	Civil Engineering.
Humphreys, John T	Civil Engineering.
Leverett, Storer	Civil Engineering.
Maxwell, C. H	Agricultural.
Moore, David W	Classical.*
Newman, A. J	Classical.
Oliver Wallace	Classical.
Pace, Henry	Classical.
Patton, Clyde C	Classical.
Pendergrass, J. J	Classical.
Pittman, H. N	Mechanical Engineering.
Pruitt, W. E	Scientific.*
Quinney, W. R	Classical.
Redus, John L	Classical.
Reed, William L	Irregular Agricultural.
Reynolds, Farie	Normal.
Rutherford, Julia	Irregular.
Sellers, Jordan	Scientific.
Skelton, Gordon	Civil Engineering.

Treadwell, Evans	Normal.
Turner, T.	Civil Engineering.
Vineyard, John B	Classical.
Walker, Lou	Scientific.
Watson, Fannie	Scientific.
Total	37.

SUB-FRESHMAN CLASS.

Atkins, John H	Civil Engineering.
Barnett, Robert M	Mechanical Engineering.
Benbrook, J. C	Scientific.*
Black, J W	Classical.
Blackwell, Ida	Normal.
Blackwell, William I	Civil Engineering.
Blanks, W C	Classical.
Bowman, James H	Agricultural.
Brown, Edward	Agricultural.
Busey, J. F	Normal.
Cassaday, Genie	Scientific.
Crawford, Della	Scientific.
Crawford, W. A	Classical.
Curry, Jennie	Scientific.
Curry, Lula M	Scientific.
Curry, May E	Scientific.
Davies, Elza D	Civil Engineering.
Davis, S. N	Civil Engineering.
Dent, Henry G	Scientific.
Duncan, L. D	Civil Engineering.
Duncan, T. G	Scientific.
Everett, J. W	Agricultural.
Evins, Adah	Normal.
Evins, A. W	Civil Engineering.
Ferguson, Arthur L	Classical.
Gregg, H. L	Classical.
Hamilton, W. J	Normal.
Harrod, J. C	Classical.
Harville, Robert T	Classical.
Hoag, E. C	Classical.
Holcomb, Cener B	Normal.
Hooper, G. W	Agricultural.
Horton, W S	Classical.
Irvin, Richard B	Civil Engineering.
Jackson, Edna	Scientific.
Jacobs, I. J	Normal.
Jennings, Lizzie	Scientific.
Jones, Bertie	Scientific.
Lee, Frank	Mechanical Engineering.
Lee, Lillie	Scientific.
Leverett, Ammie	Irregular.
Lewis, Josephine	Scientific.
Malone, J. E	Normal.
Martin, Pearl	Normal.
McKibben, F. P	Civil Engineering.
McNeely, Thomas H	Agricultural.

Middleton, Maude	Classical.
Montgomery, J. J	Classical.
Morrow, Samuel Y.	Agricultural.
Neal, James P.	Classical.
Norman, George	Classical.
Norris, Newton	Mechanical Engineering.
Oliver, Florence	Classical.
Parks, Ida L.	Scientific.
Payne, Joseph	Civil Engineering.
Perry, J. D	Agricultural.
Pollard, Mary	Scientific.
Reed, Maude	Scientific.
Reinhardt, Hattie M	Scientific.
Russell, E. C	Classical.
Simmons, L. L	Agricultural.
Simmons, J. W.	Classical.
Smith, S. K	Civil Engineering.
Smith, W. L.	Civil Engineering.
Sorrells, W. B	Classical.
Taff, Sam M	Civil Engineering.
Truett, Edward	Civil Engineering.
Turner, T. L.	Civil Engineering.
Vance, W. J.	Agricultural.
Vaulx, Julia R	Classical.
Vaulx, S. F	Classical.
Vineyard, G. H	Classical.
Wade, M. C	Normal.
Walkup, W. H	Mechanical Engineering.
Warren, Oscar B	Normal.
Watson, J. E	Normal.
Williams, J. F	Normal.
Williams, Orville H	Civil Engineering.
Wills, Joseph F	Agricultural.
Wines, Lulu M	Scientific.
Wood, Albert C	Civil Engineering.
Wood, Ben F	Civil Engineering.
Woodward, B. B	Agricultural.
Young, Charles I	Civil Engineering.
Total	84

A CLASS.

Allen, William A	Agricultural.
Anderson, Tim	Civil Engineering.
Baum, Lillia	Normal.
Baxter, Bertha	Normal.
Beers, Leslie	Civil Engineering.
Bell, Joseph F	Civil Engineering.
Bibb, Blanche	Classical.
Bocquin, G. S. B	Agricultural.
Bolinger, Florence	Scientific.
Booker, William B	Mechanical Engineering.
Boone, Daniel A	Normal.
Bowen, Robert L	Agricultural.

Bray, Thomas W	Civil Engineering.
Brooks, Minnie	Normal.
Buckner, Jennie	Normal.
Burton, W. H	Mechanical Engineering.
Campbell, Effie	Normal.
Campbell, Robert O	Civil Engineering.
Carden, Charles R	Agricultural.
Carter, Geo. W	Civil Engineering.
Carter, Lizzie M.	Normal.
Carter, Paul D	Mechanical Engineering.
Cassaday, Mamie H	Normal.
Chapman, H. F	Civil Engineering.
Cockman, J. A	Agricultural.
Coffey, Emma	Normal.
Creagar, James M	Civil Engineering.
Davies, Clyde	Civil Engineering.
Dowell, Robert W	Agricultural.
Durden, J. P., Jr	Agricultural.
Evans, Ella	Normal.
Fannin, Fred H	Classical.
Ferguson, J. W	Mechanical Engineering.
Finley, Della	Normal.
Fishback, W. M., Jr	Agricultural.
Funk, William R	Mechanical Engineering.
Funston, W. P	Mechanical Engineering.
Gallaway, Paul	Agricultural.
Garrison, Linda	Classical.
Gatewood, James E	Agricultural.
Gibson, W. A	Agricultural.
Gleghorn, William A	Agricultural.
Gordon, James	Mechanical Engineering.
Gregg, Ida	Classical.
Griffith, E. Blanche	Classical.
Griffith, Gaylord C	Civil Engineering.
Gulledge, W T	Mechanical Engineering.
Hale, Irwin	Agricultural.
Hall, Una	Classical.
Harris, Charles A	Agricultural.
Harris. Rena	Normal.
Harris, Robert C	Scientific.
Harvey, Zoni	Normal.
Haws, J. P	Normal.
Hays, G. W	Mechanical Engineering.
Heberly, Joseph A	Civil Engineering.
Hight, Beulah	Normal.
Hinton, C. A.	Agricultural.
Hocott, Joseph J	Agricultural.
Hoge, H. M	Agricultural.
Holway, Lutie	Normal.
Howell, Willey	Agricultural.
Howerton, C. T	Civil Engineering.
Hulse, Marcus L	Scientific.
Hunt, Gertie	Normal.
Illian, W. L	Agricultural.

Jackson, Hugh	Civil Engineering.
Jelks, John L	Classical.
Jobe, Fannie	Normal.
Johnson, Geo. W	Civil Engineering.
Johnson, Lawson W	Civil Engineering.
Johnson, Lydia	Normal.
Jones, John E	Agricultural.
Kell, John T.	Civil Engineering
Lee, Myra M	Scientific.
Leverett, Charles J	Agricultural.
Lewis, Lucius L	Classical.
Marion, H M	Mechanical Engineering.
McBride, Emma	Normal.
McBride, Toccoa	Normal.
McCarty, Myrta.	Normal.
McDearmon, Ben C	Mechanical Engineering.
McIlvoy, Annie	Scientific.
McIlroy, Charles D	Civil Engineering.
McIntosh, J. E.	Agricultural.
McKibben, William W	Civil Engineering.
Medearis, Robert S	Agricultural.
Miller, C. H	Civil Engineering.
Mitchell, J. L	Agricultural.
Mooring, Blanche	Scientific.
Morley, Mary	Normal.
Morris, W. R	Civil Engineering.
Mullins, Charles T.	Agricultural.
Mullins, William E	Civil Engineering.
Myers, W. P	Mechanical Engineering.
Nauck, Charles A	Mechanical Engineering.
Nevins, Kate	Scientific.
Norris, Annie	Scientific.
Ogg, M. F.	Agricultural.
Rattenburg, Blanche	Scientific.
Rattenburg, Edith F	Scientific.
Reinhardt, Allyn	Agricultural.
Russell, J. A.	Agricultural.
Sexton, Robert	Mechanical Engineering.
Shibley, Carl	Civil Engineering.
Shipley, John	Mechanical Engineering.
Shreve, H. W	Civil Engineering.
Sibley, Moreau L	Agricultural.
Simmons, Ella	Normal.
Simpson, L. E.	Mechanical Engineering.
Simpson, Nettie V	Scientific.
Smith, Albert E	Mechanical Engineering.
Souter, J. A	Civil Engineering.
Spears, William S	Agricultural.
Speer, G. H	Classical.
Stark, H. L	Mechanical Engineering.
Stewart, Carrie M	Classical.
Stewart, Grace	Classical.
Taylor, Thomas J	Agricultural.
Thomas, Alice	Normal.

Treadwell, S. C.	Normal.
Vaughan, Rufus A.	Mechanical Engineering.
Wade, Eddie	Normal.
Wade, Lena	Normal.
Ward, W. J.	Agricultural.
Ware, John N.	Civil Engineering.
West, J. B	Mechanical Engineering.
West, S. C.	Normal.
White, Lula	Normal.
Whitney, J. F.	Agricultural.
Wilkins, J. S.	Civil Engineering.
Williams, Mattie B	Normal.
Willoughby, H. L.	Scientific.
Wilson, Lizzie	Normal.
Winggo, Zenas	Normal.
Yoes, J. W	Scientific.
Total	136

B CLASS.

Anderson, O. S.
Baker, Wm. A.
Beers. Philip
Belt, Mattie
Bethel, Arthur
Blackmer, Stella
Bonds, A. C.
Bray, Etta
Buckner, Chas.
Buckner, Walker
Baum, Edward
Baylor, Della
Belding, A. G.
Benton, John
Blackmer, A. C.
Blagg, Wm. M.
Bower, Lillie
Brewer, J. G.
Buckner, Geo. W.
Bugg, O. L.
Carlisle, Edward E
Cravens, Hal E.
Cunliff, John
Carnes, Jas. J.
Cooper, G. W.
Crozier, J. P.
Duncan, Cameron
Edmonds, David
Earle, B. R.
Fannin, Frederica
Fishback, H. Y.
Fletcher, John P.
Freyschlag, Sallie
Ferguson, Gussie
Flemming, Archie
Forbes, Emma
Frost, E. L.
Gladden, G. L.
Greathouse, Addie
Griffin, Maggie
Gilbreath, J. M.
Gray, Lillie
Greer, Luther
Ham, Fred
Hite, David R.
Hooper, Stella
Hunt, Samuel L
Hensley, Ida C.
Hollis, J. H.
Hudson, Lillie
Hunter, Wm.
Jackson, Oza
Jones, Isaac D.
Jackson, Will
Jones, J. S.
Lee, Eva
Leverett, Abbie
Lee, T. H.
Lewis, Lena
McIlroy, Kate
McNair, Maude
McNair, May
McRay, Mack
McNeely, Susie
Meyers, J. H.
Millsaps, Wm. J.
Moore Cora
Moore, J. F.
Moore, Gertie
Moore, Nolen
Mullins, Lucy
Mullins, J. S.
Murray, Annie L.
Murray, Augusta
Murray, Nannie
Nevins, Chas. L.
Padgitt, James Thos.
Padgitt, Chas. W.
Rainey, Pinckney L.
Rainey, Wilsie
Rainey, Wright H.
Rainwater, Carrie,
Riley, Martin
Sanderson, Samuel
Sannoner, J. H., Jr.
Savage, C. C.
Scott, James W.
Scott, John E.
Scott, Mamie
Scott, Willard B.
Scott, Wm. M.
Smith, Gertie
Taylor, Douglas B.
Taylor, Mattie
Thomas, C. K.
Tunnell, J. E.
Tunstall, Mary V.
Ussery, Bedford
Vaughan, Mollie
Vaught, L. A.
Vaulx, Kate
Vaulx, Madge

Wade, Leila
Wade, Thos. T.
Wardin, Bessie
Washington, John D.
Washington, Ruby
Williams, Clora
Williams, Jennie
Wilson, Nellie
Yarbrough, W. P.
Yoes, G. C.

Total.. 112

SUMMARY.

Students in Agricultural Course	48
Students in Mechanical Engineering Course	26
Students in Civil Engineering Course	68
Students in Scientific Course	46
Students in Classical Course	55
Students in Normal Course	54
Students taking an Irregular Course	6
Literary	2
Students in the "B" Class	112
Total Number of Matriculates at Fayetteville	417
Number Studying Music	27
Medical Department at Little Rock	67
Branch Normal College at Pine Bluff	181
Total	665

GENERAL INFORMATION.

The aims of the University are set forth in the following sections of the acts of Congress and of the General Assembly of Arkansas, under which it was established:

The act of Congress of 1862, appropriating lands to establish colleges in the States, provides that all moneys derived from their sale "shall be inviolably appropriated by each State which may take and claim the benefit of this act, to the endowment, support and maintenance of at least one college, where the leading objects shall be, without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts, in such manner as the Legislatures of the States may respectively prescribe, in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions of life."

(U. S. Statutes, Vol. 61, Stat. 7, Sec. 4).

Our own General Assembly, in accepting the orginal grant and in creating the University, provides that the fund realized therefrom, "shall be forever devoted and applied to the endowment and maintenance, under such laws or articles of incorporation as may be by the General Assembly hereafter provided, of an institution of learning to be styled 'The Arkansas Industrial University,' wherein shall be taught, in addition to the usual course of study prescribed in universities, the science and practice of Agriculture, the Mechanical Arts, Engineering and Military Science and Tactics." Act of July 23, 1868.)

In order further to emphasize the Agricultural and Mechanical Departments, the late Legislature, in what is known as the Barker bill, while making a handsome appropriation to each of these leading Departments, ordained that all male beneficiaries should pursue one of these courses; restricted the subjects to be taught to beneficiaries; and fixed the number and character of the professorships. The evident design of the Legislature was to respond to the demands and needs of the State, by creating an Agricultural and Mechanical Institution, with such subsidiary courses as the amount of the appropriation would allow. The present Board of Trustees and Faculty of the Institution, aware of the necessities of the State, and fully in accord with the policy outlined by the Legislature, have done all in their power, in laying out the appropriation and drawing up the courses of study, to meet the wants, both of the great mass of the State, as well as the minority also in a subsidiary way. We are fully persuaded that the Agricultural and Mechanical courses here offered and the facilities afforded by the Legislative appropriations will enable us to turn out graduates in these Departments that will compare favorably with those of any other school, while at the same time, with little or no additional cost to the State, strong Classical and Normal courses have been laid down. We engage to turn out B. A. and L. I. graduates, strong, healthy, vigorous, and at the same time furnished with far more than the average knowledge, training and experience found in graduates of this character from other Colleges.

The courses offered are the following:

1.	Agricultural, leading the Degree of B S. A.	See Schedule p. 25	Detailed Statement p. 39
2.	Short Agriculture, ending with Soph. year,	“ “ “ 26	“ “ “ 47
3.	Mechanical Engineering, leading to Degree of B. M. L.	“ “ “ 27	“ “ “ 55
4.	Manual Training, ending with the Soph. yr.	“ “ “ 28	“ “ “ 49
5.	Civil Engineering, leading to the Degree of B. C. E.	“ “ “ 29	“ “ “ 56
6.	Scientific, leading to the degree of B. S.	“ “ “ 30	“ “ “ 20
7.	Classical course, leading to the Degree of B A.	“ “ “ 31	“ “ “ 19
8.	Normal course, leading to the Degree of L. I.	“ “ “ 32	“ “ “ 72

Courses 1, 2, 3, 4, 5, 6, 7 are free to all beneficiaries, but if any language other than English is taken, the regular tuition fee will be exacted.

Courses 7 and 8 can be taken only by the payment of the regular tuition fee of ten dollars per year.

All courses *for male students* are required to include practical work at from three cents to ten cents per hour. The hours of the day are, therefore, divided into two parts; the morning hours are devoted to recitations in the various courses; three hours of the afternoon are devoted to the various kinds of practical work. The schedule of courses from p. 25 to p. 32 includes only the five periods into which the hours from 9 a. m. to 12:20 p. m. are divided. For afternoon work all male students are referred to p. 33 and following, where the full schedule of afternoon work is given.

Arrangements have been made so that a student in any course *may* by application to the Faculty and at the discretion of that body, take, as a fifth study, French in the Freshman and Sophmore years, and German in the Junior and Senior years; and where possible, as stated in schedule, p. 25 to p. 32, the student has been allowed to use his own discretion in choosing the language indicated or the study with which it is made elective; but in all cases, beneficiaries, when they take any language other than English, must pay the regular tuition fee of ten dollars per year.

The Classical course is intended to meet the wants of those who, while strong and steady enough to do the practical work required, have the energy and will-power to do the mental work of a B. A. course, and obtain that degree as a basis for professional life, or for mental training; of those who have State pride enough not to want to go outside of the State to obtain that training which the State *ought to*, *can*, and *does* afford its sons. The very best material of the State, thus dissociated from all its interests and belongings during the whole period of training, is either permanently lost to the State, or comes back to work at an immense disadvantage for want of knowledge of those of whom under other circumstances there would have existed the truest of all knowledge, the intimate association of college life. We call upon the patriotism of the State to stop this annual emigration, and are glad to be able on our own part, to offer a strong and carefully planned B. A. course.

The Scientific course is intended to offer thorough and extensive training in the principles of General Science, together with English, and French and German as electives.

Especial attention is paid to the Physical and Biological Sciences.

An Elementary course embracing Chemistry, Botany and Zoology is taken in the Sub-Freshman year and followed by a continuation of these subjects with copious laboratory and practical work, together with a full course in Physics, throughout the collegiate year. It is believed that the advantages offered in Chemistry, Biology and allied sciences in this course, will be found scarcely inferior to those of similar courses in any of our higher institutions of learning. The well equipped Chemical, Mineralogical and Biological Laboratories of the University afford ample means of illustration as well as excellent opportunities for practical scientific work, and for original investigation.

Those who satisfactorily complete the course in General Science are entitled to the degree of B. S. (Bachelor of Science). The afternoon exercises in this course are confined to the Laboratory, Shop, Field Surveying, and Drawing, but the student may substitute work on the farm for part of his shop work if he so desires. The course in General Science is open to all beneficiaries, but if they choose to take additional work in French or German they must pay the regular tuition fee of ten dollars per year.

By a resolution of the Board of Trustees, every parent or guardian is required to choose for his son or ward, if a minor, either the Mechanical or Agricultural course of labor, and to make a written communication to the President at the entrance of the student, stating the choice made.

The manual work required of young ladies is Industrial Drawing, Wood Carving, Repousse Work, Tapestry, Painting and Designing.

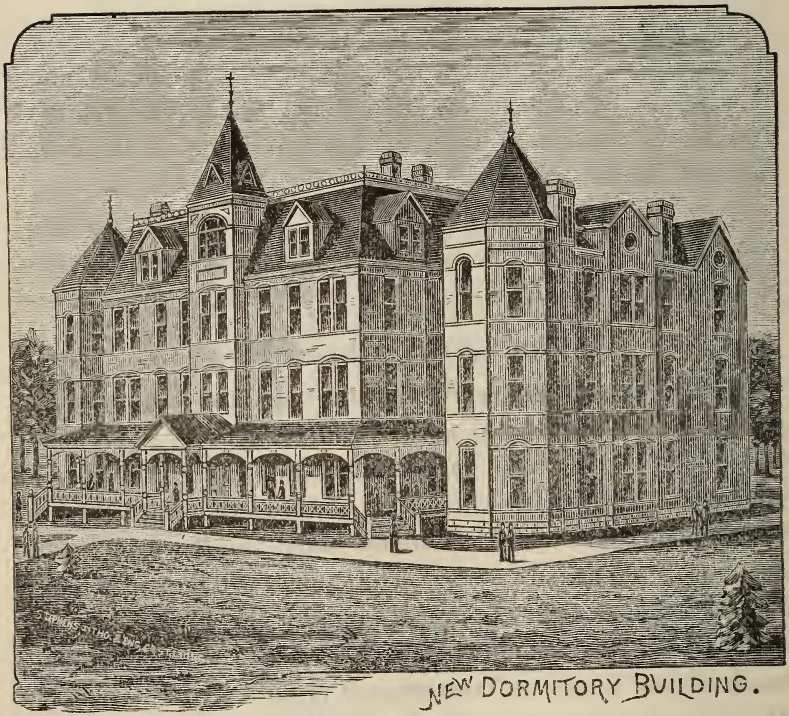
CONDITIONS FOR ADMISSION TO FRESHMAN CLASS.

All new students seeking to enter the Freshman Class will be examined in Geography, U. S. History, English Grammar (Analysis and Composition), Arithmetic, Algebra (to Quadratic Equations), Geometry (three books) and Latin, if the course of study embraces Latin.

Candidates for higher classes, or for the Freshman Class, after beginning of session, will be examined also in the subjects passed over by the class.

PREPARATORY DEPARTMENT.

The A Class and the Sub-Freshman Class constitute the Preparatory Department, and, as will be seen by reference to the schedule, p. 25 to p. 32, are substantially the same for all courses. The B Class will consist of those that fall below the requirements for the A Class in any study, and it will be used to coach up students so failing. The student will remain in it only so long as is necessary to prepare him for the upper Class. In order that this coaching work may the more readily and rapidly be done, the Board of Trustees, not regarding the students of this Class as regular members of the University, have remitted the labor required in their case.


STEPHENS LITHO & ENG.

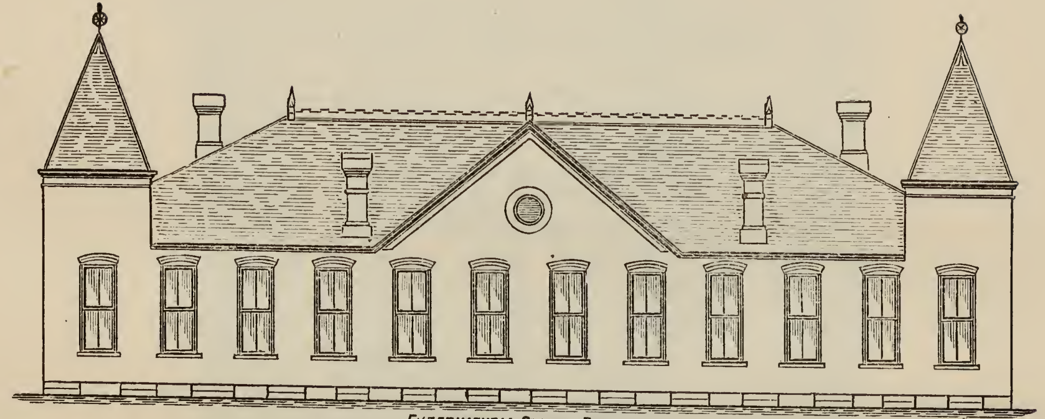
NEW DORMITORY BUILDING.

COURSES OF STUDY

—IN THE—

ARKANSAS INDUSTRIAL UNIVERSITY.

SESSION 1888-89.



EXPERIMENTAL STATION BUILDING

COURSES OF STUDY.

I. AGRICULTURAL COURSE FOR THE DEGREE OF BACHELOR OF SCIENTIFIC AGRICULTURE (B. S. A.).

A CLASS.	1	English	English	English.
	2	Arithmetic	Arithmetic	Arithmetic.
	3	Geography	U. S. History	U. S. History.
	4	Reading and Spelling	Reading and Spelling	Reading and Spelling.
SUB-FRESH. CLASS.	1	Elementary Chemistry.		
	2		Elementary Botany	Elementary Physiology.
	3	Geometry	Algebra	Algebra.
	4	Physical Geography	Phys'l Geo & Bk Keep'g	Book-Keeping.
	5	English	English	English.
FRESHMAN CLASS.	1	Algebra	Algebra and Geometry	Geometry.
	2	English	English	English.
	3			
	4	Physics	Physics	Agriculture.
	5	Physiology	Botany	Zoology.
SOPHOMORE CLASS.	1	General History	General History	General History.
	2	Structural Botany	Entomology	Stock Feeding.
	3	General Chemistry	General Chemistry	General Chemistry.
	4			
	5	Geometry	Plane Trigonometry	Veterinary Anatomy.
JUNIOR CLASS.	1	Mineralogy	Geology	Geology.
	2			Horticulture.
	3	Veterinary Anatomy	Veterinary Science	Veterinary Science.
	4	Analytical Chemistry	Analytical Chemistry	Analytical Chemistry.
	5	Agriculture	Agriculture	
SENIOR CLASS.	1			
	2	Veterinary Science	Dairy Husbandry	Dairy Husbandry.
	3	Horticulture	Surveying	Agricultural Machinery.
	4	Stock Breeding	Stock Breeding	Stock Breeding
	5	Analytical Chemistry	Agricultural Chemistry.	Political Economy.

COURSES OF STUDY—CONTINUED.

II. SHORT AGRICULTURAL COURSE.

A CLASS.	1			
	2	Same as long.	Same as long.	Same as long.
	3	Agricultural Course	Agricultural Course	Agricultural Course.
	4			
SUB-FRESH. CLASS.	1	Same as long.	Same as long	Same as long.
	2	Agricultural Course	Agricultural Course	Agricultural Course.
	3			
	4			
	5			
FRESHMAN CLASS.	1	Algebra	Algebra and Geometry.	Geometry.
	2	English	English	English.
	3			
	4	Physics	Agriculture.	Agriculture.
	5	Physiology.	Botany.	Zoology.
SOPHOMORE CLASS.	1	General History	General History.	General History
	2	Horticulture	Dairy Husbandry	Dairy Husbandry.
	3	General Chemistry	General Chemistry	General Chemistry.
	4	Stock Breeding.	Stock Breeding.	Stock Breeding.
	5			

COURSES OF STUDY—CONTINUED.

III. MECHANICAL ENGINEERING COURSE FOR DEGREE OF MECHANICAL ENGINEER (M. E.)*

CLASSES.	HOURS.	FIRST TERM.	SECOND TERM.	THIRD TERM.
A CLASS.	1	English	English	English.
	2	Arithmetic	Arithmetic	Arithmetic.
	3	Geography	U. S. History	U. S. History.
	4	Reading and Spelling	Reading and Spelling	Reading and Spelling.
SUB-FRESHMAN CLASS.	1	Elementary Zoology		
	2		Elementary Botany	Elementary Physiology.
	3	Geometry	Algebra	Algebra.
	4	Physical Geography	Physical Geog. & B'k-K'p'g	Book-Keeping.
	5	English	English	English.
FRESHMAN CLASS.	1	Algebra	Algebra and Geometry	Geometry.
	2	English	English	English.
	3	French (elective)	French (elective)	French (elective).
	4	Physics	Physics	Physics.
	5	Shop Work Appliances	Roads, Streets & Pavem'nts	Descriptive Geometry.
SOPHOMORE CLASS.	1	General History	General History	Elements of Mechanism.
	2	Heat	Surveying	Surveying.
	3	General Chemistry	General Chemistry	General Chemistry.
	4	French (elective)	French (elective)	French (elective)
	5	Geometry	Plane Trigonometry	Spherical Trigonometry.
JUNIOR CLASS.	1	Sanitary Engineering	Machinery and Mill Work.	Machinery and Mill Work.
	2	Analytical Geometry.	Anal. Geom. and Calculus.	Calculus.
	3	Steam Engineering	Steam Engineering	Elementary Mechanics.
	4	Analytical Chemistry	Analytical Chemistry	Analytical Chemistry
	5	German (elective)	German (elective)	German (elective).
SENIOR CLASS.	1	Applied Mechanics	Applied Mechanics	Methods of Testing Steam Machinery.
	2	Materials of Construction	Specifications and Contracts	Hydraulic Engineering.
	3	Thermodynamics	Boiler Design	Steam Engine Design.
	4	German (elective)	German (elective)	German (elective).
	5	Friction and Lost Work	Valve Gear Design	Electrical Engineering.

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* Drawing, Shop Work, Surveying and Laboratory Practice are included in the practical afternoon exercises.

COURSES OF STUDY—CONTINUED.

IV.—MANUAL TRAINING COURSE.*

CLASSES.	HOURS	FIRST TERM.	SECOND TERM.	THIRD TERM.
A CLASS.		Same as Mechanical Engineering Course.	Same as Mechanical Engineering Course.	Same as Mechanical Engineering Course.
SUB-FRESH. CLASS.		Same as Mechanical Engineering Course.	Same as Mechanical Engineering Course.	Same as Mechanical Engineering Course.
FRESHMAN CLASS.		Same as Mechanical Engineering Course.	Same as Mechanical Engineering Course.	Same as Mechanical Engineering Course.
SOPHOMORE CLASS.	1	General History	General History..........	Elements of Mechanism.
	2	Steam Engineering.......	Steam Engineering.......	Steam Engineering.
	3	General Chemistry.......	General Chemistry........	Elements of Mechanics.
	4	....	....	....
	5	Geometry	Plane Trigonometry......	Spherical Trigonometry.

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*Drawing and Shop Work, constitute the practical afternoon exercises.

COURSES OF STUDY—CONTINUED.

V.—CIVIL ENGINEERING COURSE FOR DEGREE OF CIVIL ENGINEER (C. E.)*

CLASSES.	HOURS.	FIRST TERM.	SECOND TERM.	THIRD TERM.
A CLASS.		Same as Mechanical Engineering Course.	Same as Mechanical Engineering Course.	Same as Mechanical Engineering Course.
SUB-FRESHMAN CLASS.		Same as Mechanical Engineering Course.	Same as Mechanical Engineering Course.	Same as Mechanical Engineering Course.
FRESHMAN CLASS.		Same as Mechanical Engineering Course.	Same as Mechanical Engineering Course.	Same as Mechanical Engineering Course.
SOPHOMORE CLASS.		Same as Mechanical Engineering Course.	Same as Mechanical Engineering Course.	Same as Mechanical Engineering Course.
JUNIOR CLASS.	1	Sanitary Engineering	Geology	Geology.
	2	Analytical Geometry	Anal. Geom and Calculus.	Calculus.
	3	Road Engineering	Road Engineering	Elementary Mechanics.
	4	Analytical Chemistry	Analytical Chemistry	Analytical Chemistry.
	5	German (elective)	German (elective)	German (elective).
SENIOR CLASS.	1	Applied Mechanics	Applied Mechanics	Study of Engin. Structures
	2	Materials of Construction.	Specifications & Contracts.	Hydraulic Engineering.
	3	Astronomy	Bridge Engineering	Bridge Engineering.
	4	German (elective)	German (elective)	German (elective).
	5	Steam Engineering	Arches and Dams	Electrical Engineering.

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*Drawing, Surveying, Shop Work, and Laboratory Practice, constitute the practica afternoon exercises.

COURSES OF STUDY—Continued.

VI.—SCIENTIFIC COURSE FOR DEGREE OF BACHELOR OF SCIENCE (B. S.)

A CLASS.	1	English	English	English.
	2	Arithmetic	Arithmetic	Arithmetic.
	3	Geography	U. S. History	U. S. History.
	4	Reading and Spelling	Reading and Spelling	Reading and Spelling.
SUB-FRESH. CLASS.	1	Elementary Chemistry		
	2		Elementary Botany	Elementary Physiology
	3	Geometry	Algebra	Algebra.
	4	Physical Geography	Physical Geography & Book-Keeping	Book-Keeping.
	5	English	English	English
FRESHMAN CLASS.	1	Algebra	Algebra and Geometry	Geometry.
	2	English	English	English.
	3			
	4	Physics	Physics	Physics.
	5	Physiology	Botany	Zoology.
SOPHOMORE CLASS.	1	General History	General History	General History.
	2	Structural Botany.	Entomology	Horticulture.
	3	General Chemistry	General Chemistry	General Chemistry.
	4			
	5	Geometry	Plane Trigonometry	Spherical Trigonometry
JUNIOR CLASS.	1	Mineralogy	Geology	Geology.
	2	Analytical Geom	Analytical Geom	Calculus or Logic.
	3	English Literature or German	English Literature or German	English Literature or German.
	4	Analytical Chemistry	Analytical Chemistry	Analytical Chemistry.
	5			
SENIOR CLASS.	1			
	2	Anglo-Saxon or French	Anglo-Saxon or French	English Philology or French
	3	Astronomy	Surveying or History of Education	Electricity or School Management
	4	Advanced Biology or Heat or Metallurgy	Advanced Biology	Economic Geology.
	5	Physiology	Physiology and Ethics	Political Economy.

COURSES OF STUDY—CONTINUED.

VII. CLASSICAL COURSE FOR BACHELOR OF ARTS (B. A.)

CLASSES.	HOURS.	FIRST TERM.	SECOND TERM.	THIRD TERM.
A CLASS.	1	English	English	English.
	2	Arithmetic	Arithmetic	Arithmetic.
	3	Geography	U. S. History	U. S. History.
	4	Reading and Spelling(Apt'l)	Reading and Spelling (opt'l)	Reading and Spelling (opt'l)
	5	Latin	Latin	Latin.
SUB-FRESHMAN CLASS.	1	Elementary Zoology (opt'l)	Elementary Botany (opt'l).	Book-Keeping.
	2	Latin	Latin	Latin.
	3	Geometry	Algebra	Algebra.
	4	Physical Geography	Phys. Geog. & B'k-Keep'g	Physiology (optional).
	5	English	English	English.
FRESHMAN CLASS.	1	Algebra	Algebra and Geometry	Geometry.
	2	English (optional)	English	English.
	3	*Greek, *French.	*Greek, *French	*Greek, *French.
	4	*Physics	*Physics	*Physics.
	5	Latin	Latin	Latin.
SOPHOMORE CLASS.	1	General History (optional).	General History (optional)	General History.
	2	Latin	Latin	Latin.
	3	*General Chemistry	*General Chemistry	*General Chemistry.
	4	*Greek, *French	*Greek, *French	*Greek, *French.
	5	Geometry	Plane Trigonometry	Spher. Trigonometry (opt'l)
JUNIOR CLASS.	1	*Mineralogy	*Geology	Latin.
	2	Analytical Geometry	Analytical Geometry and Calculus (optional).	*Calculus.
	3	English Literature.	English Literature	English Literature.
	4	Latin.	Latin	Logic.
	5	*Greek, *German	*Greek, *German.	*Greek, *German.
SENIOR CLASS.	1	Latin	Latin (optional)	Latin.
	2	Anglo-Saxon	Anglo-Saxon	English Philology.
	3	*Greek—*Astronomy	*Greek	*Greek.
	4	*German	*German—*Surveying	*German.
	5	Psychology	Psychology and Ethics	Ethics and Political Econ'y.

* Of the studies thus marked in each term, one is required.

COURSES OF STUDY—CONTINUED.

VIII. NORMAL COURSE FOR LICENTIATE OF INSTRUCTION (L. I.)

CLASSES.	HOURS.	FIRST TERM.	SECOND TERM.	THIRD TERM.
A CLASS.	1	English	English	English.
	2	Arithmetic	Arithmetic	Arithmetic.
	3	Geography	U. S. History	U. S. History.
	4	Reading and Spelling (opt'l)	Reading and Spelling (opt'l)	Reading and Spelling (opt'l)
	5	Latin	Latin	Latin.
SUB-FRESHMAN CLASS.	1	El. Chemistry (opt'l)	Pedagogics	
	2	Pedagogics.	Elementary Botany (opt'l).	Elementary Physiology.
	3	Geometry	Algebra	Algebra.
	4	Latin or Phys. Geography.	Latin or Physical Geography and Book-Keeping.	Latin or Book-Keeping.
	5	English	English	English.
FRESHMAN CLASS.	1	Algebra	Algebra and Geometry	Geometry
	2	English	English	English or Physics.
	3		History of Education	School Management.
	4	Physics	Physics (optional)	Zoology (optional).
	5	Latin	Latin	Latin.
SOPHOMORE CLASS.	1	General History	General History or Surveying (optional).	General History.
	2	Latin	Latin	Latin.
	3	General Chemistry	General Chemistry	Psychology.
	4		Science of Education	Const. and School Law.
	5	Geometry	Plane Trigonometry	Ethics (optional).

SCHEDULE OF PRACTICAL EXERCISES—AFTERNOON WORK.

CLASS.	DAY.	AGRICULTURAL COURSE.			SCIENTIFIC COURSE.		
		FIRST TERM.	SECOND TERM.	THIRD TERM.	FIRST TERM.	SECOND TERM.	THIRD TERM.
A.	Monday	Shop	Draw and drill	Shop	Farm or shop	Draw and drill	Farm or shop
	Tuesday	Draw and drill	Shop	Draw and drill	Draw and drill	Farm or shop	Draw and drill
	Wednesday	Farm	Draw and drill	Farm	Farm or shop	Draw and drill	Farm or shop
	Thursday	Draw and drill	Farm	Draw and drill	Draw and drill	Farm or shop	Draw and drill.
	Friday	Farm		Farm	Farm or shop		Farm or shop
	Saturday		Farm			Farm or shop	
SUB-FRESH.	Monday	Draw and drill	Farm	Draw and drill.	Draw and drill.	Farm or shop	Draw and drill
	Tuesday	Farm	Draw and drill	Farm	Farm or shop	Draw and drill	Farm or shop
	Wednesday	Draw and drill	Farm	Draw and drill.	Draw and drill	Farm or shop	Draw and drill.
	Thursday	Farm	Draw and drill	Farm	Farm or shop	Draw and drill.	Farm or shop
	Friday		Shop			Farm or shop	
	Saturday	Shop		Shop	Farm or shop		Farm or shop
FRESH-MAN.	Monday	Farm	Farm	Farm	Farm or shop	Farm or shop	Farm or shop
	Tuesday	Draw and drill	Draw and drill	Draw and drill.	Draw and drill	Draw and drill.	Draw and drill.
	Wednesday	Farm	Farm	Farm	Farm or shop	Farm or shop	Farm or shop
	Thursday	Draw and drill.	Draw and drill	Draw and drill	Draw and drill	Draw and drill	Draw and drill
	Friday				Farm or shop	Farm or shop	Farm or shop
	Saturday	Shop	Shop	Shop			
SOPHO-MORE.	Monday	Draw and drill	Draw and drill.	Draw and drill.	Draw and drill.	Draw and drill	Draw and drill
	Tuesday	Farm	Farm	Farm	Farm or shop	Farm or shop	Farm or shop
	Wednesday	Draw and drill.	Draw and drill	Draw and drill	Draw and drill	Draw and drill	Draw and drill.
	Thursday	Biol. lab	Biol. lab	Shop	Biol lab	Biol lab	Shop
	Friday	Biol. lab	Biol. lab	Farm	Biol. lab	Biol. lab	Farm or shop
	Saturday						
JUNIOR.	Monday	Chem. lab.	Chem. lab	Chem. lab	Chem. lab	Chem. lab	Chem. lab
	Tuesday	Farm and drill.	Drill	Drill	Farm or shop & drill.	Drill	Drill
	Wednesday	Chem. lab.	Chem. lab.	Chem. lab.	Chem. lab	Chem. lab	Chem lab.
	Thursday	Chem. lab. and drill	Chem. lab and drill	Chem. lab. and drill	Chem. lab. and drill	Chem. lab. and drill.	Chem lab and drill
	Friday	Chem lab	Chem. lab	Farm	Chem. lab	Chem. lab	Farm or shop
	Saturday		Geological survey	Geological survey		Geological survey	Geological survey
SENIOR.	Monday	Farm and drill	Farm and drill	Farm and drill	Farm or shop & drill	Farm or shop & drill.	Farm or shop & drill.
	Tuesday	Farm	Surveying	Surveying	Farm or shop	Surveying	Surveying
	Wednesday	Farm and drill	Farm and drill	Farm and drill.	Farm or shop & drill.	Farm or shop & drill.	Farm or shop & drill
	Thursday	Farm	Farm	Farm	Biol. lab	Biol. lab	Phys. lab
	Friday	Farm	Farm	Farm	Biol lab	Biol. lab	Phys. lab
	Saturday						

SCHEDULE OF PRACTICAL EXERCISES—AFTERNOON WORK.

CLASS	DAY.	CIVIL ENGINEERING COURSE.			MECHANICAL ENGINEERING AND MANUAL TRAINING.		
		FIRST TERM.	SECOND TERM	THIRD TERM.	FIRST TERM.	SECOND TERM	THIRD TERM
A.	Monday	Draw and drill	Shop	Draw and drill	Draw and drill.	Shop	Draw and drill
	Tuesday	Shop	Draw and drill	Shop	Shop	Draw and drill.	Shop
	Wednesday	Draw and drill	Shop	Draw and drill.	Draw and drill	Shop	Draw and drill
	Thursday	Shop	Draw and drill	Shop	Shop	Draw and drill.	Shop
	Friday		Shop			Shop	
	Saturday	Shop		Shop	Shop		Shop
SUB-FRESH.	Monday	Shop	Draw and drill.	Shop	Shop	Draw and drill.	Shop
	Tuesday	Draw and drill.	Shop	Draw and drill	Draw and drill	Shop	Draw and drill
	Wednesday	Shop	Draw and drill.	Shop	Shop	Draw and drill.	Shop
	Thursday	Draw and drill.	Shop	Draw and drill	Draw and drill.	Shop	Draw and drill
	Friday	Shop		Shop	Shop		Shop
	Saturday		Shop			Shop	
FRESHMAN.	Monday	Draw and drill.	Draw and drill.	Draw and drill	Draw and drill	Draw and drill	Draw and drill
	Tuesday	Shop	Shop	Shop	Shop	Shop	Shop
	Wednesday	Draw and drill.	Draw and drill	Draw and drill.	Draw and drill.	Draw and drill	Draw and drill.
	Thursday	Shop	Shop	Shop	Shop	Shop	Shop
	Friday	Shop	Shop	Shop	Shop	Shop	Shop
	Saturday						
SOPHOMORE.	Monday	Draw and drill	Draw and drill.	Draw and drill	Draw and drill	Draw and drill	Draw and drill
	Tuesday	Shop	Surveying	Surveying	Shop	Surveying	Surveying
	Wednesday	Draw and drill	Draw and drill	Draw and drill.	Draw and drill	Draw and drill	Draw and drill
	Thursday	Shop	Shop	Surveying	Shop	Shop	Shop
	Friday	Shop	Shop	Shop	Shop	Shop	Shop
	Saturday						
JUNIOR.	Monday	Surveying.	Surveying	Surveying	Chem. lab	Chem. lab	Chem. lab.
	Tuesday	Draw and drill.	Drill	Draw and drill	Draw and drill.	Draw and drill	Draw and drill
	Wednesday	Chem. lab	Chem. lab	Chem. lab	Chem. lab	Chem. lab	Chem. lab
	Thursday	Chem. lab. and drill.	Chem. lab. and drill.	Chem. lab. and drill.	Chem. lab and drill.	Chem. lab. and drill.	Chem. lab. and drill
	Friday	Chem lab.	Chem. lab (2½ hrs.).		Chem lab.	Chem. lab	Shop
	Saturday		Geol. survey	Geol. survey			
SENIOR.	Monday	Shop	Shop	Shop	Shop	Shop	Shop
	Tuesday	Draw and drill	Draw and drill	Draw and drill	Draw and drill	Draw and drill	Draw and drill
	Wednesday	Surveying	Surveying	Surveying.	Shop	Shop	Shop
	Thursday	Draw and drill	Draw and drill.	Draw and drill	Draw and drill	Draw and drill	Draw and drill.
	Friday	Shop	Shop	Shop	Shop	Shop	Shop
	Saturday						

SCHEDULE OF PRACTICAL EXERCISES—AFTERNOON WORK.

Class.	Day.	CLASSICAL COURSE.			NORMAL COURSE.		
		Third Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.
A.	Monday	Farm or shop.	Draw and drill	Farm or shop	Draw and drill	Farm or shop	Draw and drill
	Tuesday	Draw and drill	Farm or shop	Draw and drill	Shop or farm	Draw and drill	Farm or shop
	Wednesday	Farm or shop	Draw and drill	Farm or shop	Draw and drill	Farm or shop	Draw and drill
	Thursday	Draw and drill	Farm or shop	Draw and drill	Shop or farm	Draw and drill	Farm or shop
	Friday	Farm or shop.		Farm or shop		Farm or shop	
	Saturday		Farm or shop		Shop or farm		Farm or shop
SUB-FRESH-MAN.	Monday	Draw and drill	Farm or shop	Draw and drill	Shop or farm	Draw and drill	Farm or shop
	Tuesday	Farm or shop.	Draw and drill	Farm or shop	Draw and drill	Shop or farm.	Draw and drill
	Wednesday	Draw and drill	Farm or shop	Draw and drill	Farm or shop	Draw and drill	Farm or shop
	Thursday	Farm or shop	Draw and drill	Farm or shop	Draw and drill	Farm or shop	Draw and drill
	Friday		Farm or shop		Shop or farm		Farm or shop
	Saturday	Farm or shop		Farm or shop		Farm or shop	
FRESHMAN.	Monday	Farm or shop	Farm or shop.	Farm or shop	Farm or shop	Farm or shop	Farm or shop
	Tuesday	Draw and drill	Draw and drill	Draw and drill	Draw and drill	Draw and drill	Draw and drill
	Wednesday	Farm or shop	Farm or shop	Farm or shop	Farm or shop	Farm or shop	Farm or shop
	Thursday	Draw and drill	Draw and drill	Draw and drill	Draw and drill	Draw and drill	Draw and drill
	Friday						
	Saturday	Farm or shop	Farm or shop	Farm or shop	Farm or shop	Farm or shop	Farm or shop
SOPHOMORE.	Monday	Draw and drill	Draw and drill	Draw and drill.	Draw and drill	Draw and drill	Draw and drill
	Tuesday	Farm or shop	Farm or shop	Farm or shop	Farm or shop	Farm or shop	Farm or shop
	Wednesday	Draw and drill	Draw and drill.	Draw and drill	Draw and drill	Draw and drill	Draw and drill
	Thursday	Farm, shop or biological laboratory	Farm, shop or biological laboratory	Farm, shop or biological laboratory	Farm, shop or biological laboratory	Farm. shop or biological laboratory	Farm, shop or Biological laboratory
	Friday	Farm, shop or biological laboratory	Farm, shop or biological laboratory	Farm or shop	Farm, shop or biological laboratory	Farm, shop or biological laboratory	Farm or shop
	Saturday						

SCHEDULE OF PRACTICAL EXERCISES—AFTERNOON WORK.—CONTINUED.

CLASS.	DAY.	CLASSICAL COURSE.		
		FIRST TERM.	SECOND TERM.	THIRD TERM.
JUNIOR.	Monday	Farm, shop or chemical laboratory	Farm, shop or chemical laboratory	Farm, shop or chemical laboratory
	Tuesday	Farm or shop and drill	Drill	Drill
	Wednesday	Farm, shop or chemical laboratory	Farm, shop or chemical laboratory	Farm, shop or chemical laboratory
	Thursday	Farm, shop or chemical laboratory and drill	Farm, shop or chemical laboratory and drill	Farm, shop or chemical laboratory and drill
	Friday	Farm, shop or chemical laboratory	Farm, shop or chemical laboratory	Farm or shop
	Saturday		Geological survey	Geological survey
SENIOR.	Monday	Farm or shop and drill	Farm or shop and drill	Farm or shop and drill
	Tuesday	Farm or shop	Surveying	Surveying
	Wednesday	Farm or shop and drill	Farm or shop and drill	Farm or shop and drill
	Thursday	Farm or shop	Farm or shop	Farm or shop
	Friday	Farm or shop	Farm or shop	Farm or shop
	Saturday			

POST GRADUATE COURSES.

Requirements for the Degree of Master of Arts (M. A.)

Applicants for this degree must have previously taken the degree of B. A., and in addition must take, at the University, for a full scholastic year, four daily studies appointed by the Faculty.

Requirements for the Degree of Master of Science (M. S.)

Applicants for this degree must have previously taken the Degree of B. S., and in addition must take, at the University, for a full scholastic year, four daily studies appointed by the Faculty.

Requirements for the Degree of Doctor of Philosophy (Ph. D.)

1. This degree will be conferred for distinguished attainments, as shown by examination and thesis, in any one of the five following languages: Latin, Greek, German, French and English, together with subordinate attainments in two others of the five; or, for distinguished attainments in one principal and two subordinate of the following sciences: Chemistry, Physics, Geology, Biology; or, for distinguished attainments in Philosophy or in Pure and Applied Mathematics.

2. This degree shall be open to persons who have received the Degree of B. A. or B. S., at this or other reputable institutions; or B. C. E., or B. M. E., from this institution.

3. No applicant shall be admitted to examination for this degree before two full scholastic years from the date of his admission to the course, shall have passed. The last of these

two years must be passed by the candidate in resident study at the University.

4. Applicants for this degree must state in their application what particular line of study they wish to pursue.

5. A thesis, showing original research, shall be required of every applicant, the subject of which shall be announced and passed upon by a Committee of the Faculty at least one year before the time set for the final examination, and the thesis itself must be presented to the committee two months before admission to the examination. Twenty-five copies of the approved and printed thesis shall be placed in the University Library.

6. All applicants for this degree who have previously taken the B. S., M. S., B. C. E., or B. M. E. Degree, must by the end of the first year of the course, be sufficiently conversant with French and German to read with ease any scientific work written in these languages.

7. The fee for examination of applicants for the Degree of Ph. D. is $35; for the M. A. or M. S. Degree, $25, and for each Diploma, $5.

DEPARTMENT OF AGRICULTURE, CHEMISTRY AND MINERALOGY.

ALBERT E. MENKE, Superintendent.
S. S. TWOMBLY, Adjunct Professor.
W. F. BATES, Foreman of Farm.

The Agricultural Department is designed and organized to give both theoretical and practical instruction in the various branches of agriculture. The farmers have realized that there is no art, profession or occupation which demands more careful study than agriculture; that special preparation is needed no less for the pursuit of agriculture than for law, medicine or divinity, and that proper provision should be made for teaching so important a subject in the State University. The question has been discussed from time to time, and its importance set forth with more or less ability, till at length the Legislature has taken the first step towards carrying out the wishes and suggestions of the farming community. It is the policy of the present management to unite practice with theory, under the belief that in no other way beneficial results can be obtained. The equipments for practical work will compare favorably with those of any other successful agricultural college. The agricultural machinery on hand is of the newest and most approved pattern. In addition to the ordinary implements we have a Victor manure spreader; rear-pressure shoe drill; Aspinwall potato planter, with corn and fertilizer attachments, disc harrow, etc. The use of all this machinery is to give the student an insight into labor-saving devices, with a view to their economic employment. We have two commodious barns that will accommodate forty-one head of stock, machinery, feed, etc. There has also been recently constructed a fine dairy and ice house, built in accordance with tested plans. On the farm the student can become acquainted with the telling points of good stock, as he can see specimens of pure Devons, Holsteins, Sussex, Jersey, Herefords and Galloways, grade Durhams, etc. We have a large vineyard and orchard for practical horticultural work. The students are interested in and do all the practical work that occurs in either a stock, dairy, fruit or cropped farm. The purely agricultural classes in the course are Agriculture, Horticulture, Stock Breeding, Stock Feeding, Agricultural Chemistry, Veterinary Anatomy, Veterinary Science, Dairying. The various closely related branches are also provided for, as may be seen in the schedule. The following is a more detailed description of the instruction given in the different classes.

AGRICULTURE.

Reclamation of Land.—Clearing, stumping, stoning, fallowing.

Selection of farms for special purposes.

Rotation in Cropping.—Importance and necessity of rotation principles underlying it; rotations suitable to different kinds of soil; examination and criticism of different systems of rotation.

Buildings.—Location of houses, barns and stables; stables for horse, sheep and cattle.

Implements and Machinery.—Principles in construction of implements and machinery, points to be aimed at, classification, examination and description of same.

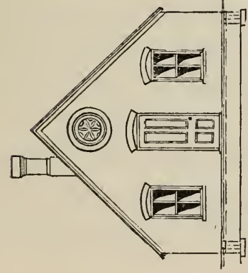
Preparation of Soil.—Modes of preparation for different crops, modes suited to various kinds of soil.

Preparation of Manures and Composts.—Home made fertilizers.

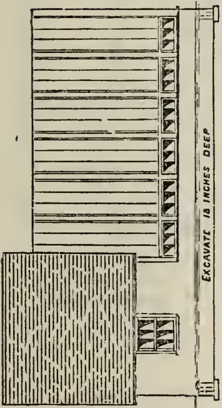
Improvement of Lands.—Ordinary cultivation, subsoiling, fallowing, draining, manuring.

Roots.—Cultivation of roots and tubers.

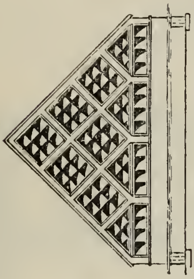
Green Fodders.—Lucerne, clover, grasses, etc.



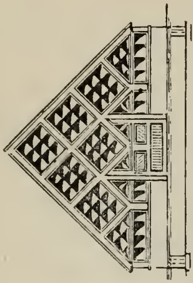
NORTH END OF FORCING HOUSE


EXCAVATE 18 INCHES DEEP

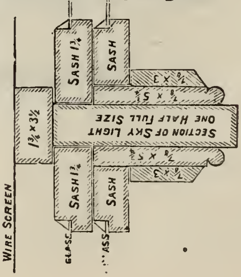
SIDE ELEVATION OF FORCING HOUSE



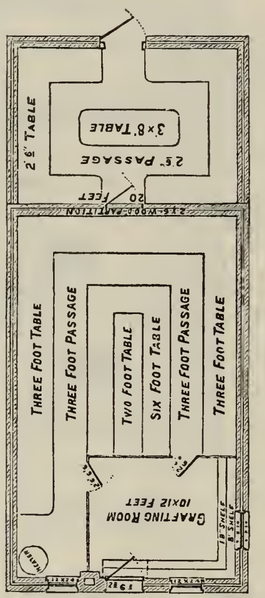
IN SIDE END OF FORCING HOUSE



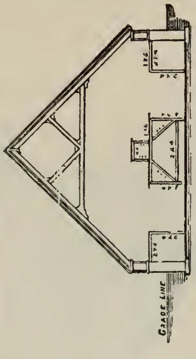
OUT SIDE END OF FORCING HOUSE


WIRE SCREEN
GLASS
GLASS
1¾ × 3½
SASH 1¾
SASH
SASH 1¾
SASH
⅞ × 3
⅞ × 5¼
⅞ × 5¼
⅞ × 3

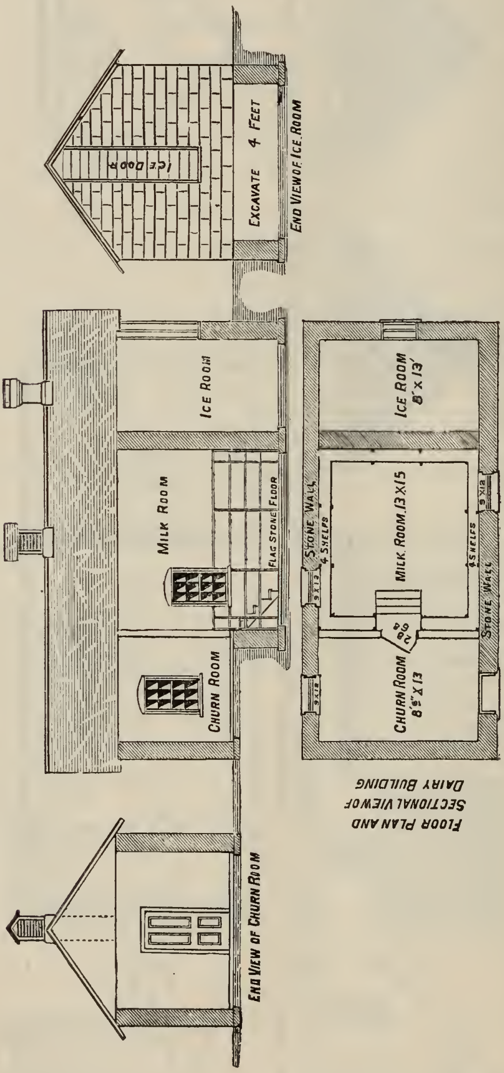
SECTION OF SKY LIGHT
ONE HALF FULL SIZE


THREE FOOT TABLE
THREE FOOT PASSAGE
TWO FOOT TABLE
SIX FOOT TABLE
THREE FOOT PASSAGE
THREE FOOT TABLE
GRAFTING ROOM
10x12 FEET
18" SHELF
8" SHELF
HEATER
2 x 6 WOOD PARTITION
20 FEET
2' 6" TABLE
3 x 8' TABLE
2' 6" PASSAGE

FLOOR PLAN SCALE ⅛ INCH



SECTION OF FORCING HOUSE


End View of Ice Room
Ice Door
Excavate 4 Feet
Ice Room
Milk Room
Flag Stone Floor
Churn Room
Stone Wall
4 Shelfs
9 X 13
Ice Room 8'x13'
Milk Room 13X15
2'8
6'4
4 Shelfs
9 X 18
Stone Wall
Churn Room 8'6"X13
9 X 18
End View of Churn Room

Floor Plan and Sectional View of Dairy Building

Miscellaneous.—Cultivation of various other crops, management of pastures, etc.

HORTICULTURE.

Preparation of soils for horticultural and floricultural purposes. Management of plants, including methods of preparation. Horticultural implements. Methods of obtaining new varieties of vegetables, fruits and flowers. Arrangement and care of flower and kitchen gardens, nurseries and orchards. The construction and care of hot beds and green houses. Practical green-house work by the student supplements the lectures.

STOCK BREEDING.

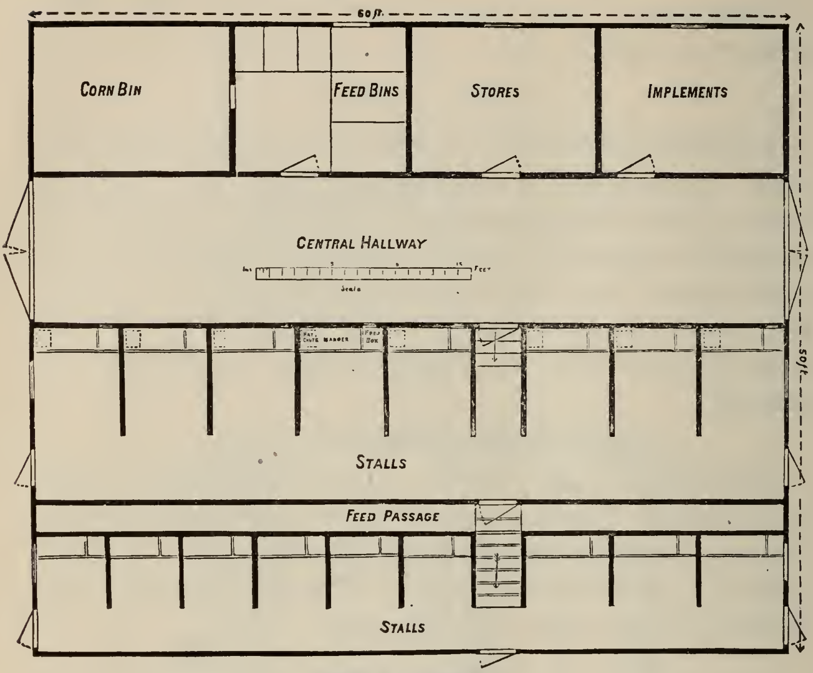
Breeding as an act; heredity of normal characters; heredity of diseases; heredity of acquired and abnormal characters; atavism; loss of correlation; variation; fecundity; in-and-in breeding; cross breeding; relative influence of parents; form of animals as an index of qualities, etc.

STOCK FEEDING.

Rations; nitrogenous foods; non-nitrogenous foods; principles of alimentation; effect of food on flavor of flesh; feeding young animals; money value of feeding stuffs; how to compound a ration economically; soiling; the economy of young beef; cost of beef; feeding steers; gain per day; the fat stock shows; summer feeding; feeding dairy cattle; feeding work stock; feeding horses, sheep, swine; effect of food on quantity of milk, etc.

VETERINARY ANATOMY.

A knowledge of the structure of the horse and other domesticated animals is acquired in this class. The instruction comprises lectures and demonstrations. The lectures include: First, a description of the locomotary apparatus, viz.: The bones, articulations and muscles; second, a description of the viscera; third, a description of the relations of the blood vessels and nerves, and of the brain and organs of the senses.


60 ft.
Corn Bin
Feed Bins
Stores
Implements
Central Hallway
Scale
Feet
Hay Chute
Manger
Feed Box
50 ft.
Stalls
Feed Passage
Stalls

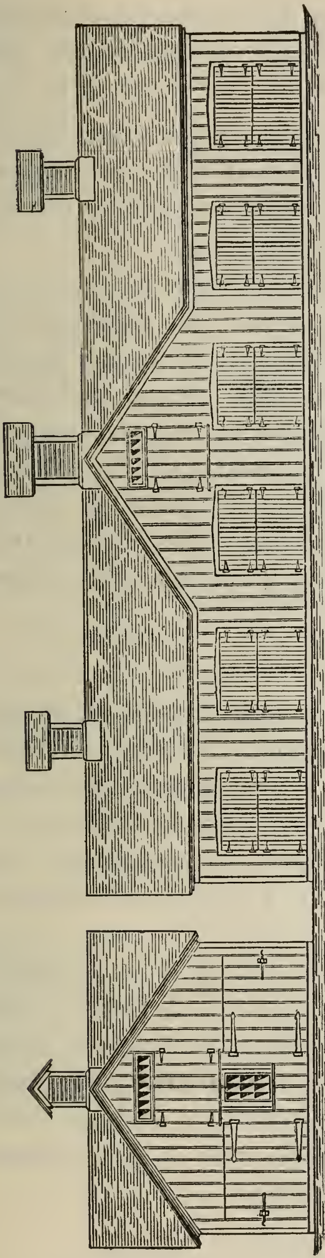
PLAN OF A. I. U. BARN

VETERINARY SCIENCE.

This course includes (to the extent useful to the practical agriculturist) the physiology of the various farm animals, their pathology or principal diseases, constitutional and local, and their treatment; the general principles to be followed in acute disease in absence of professional assistance; the nursing and dieting of sick animals. The lectures are illustrated by diagrams, sketches and preparations, and also by any cases that may occur on the farm.

DAIRYING.

Agreeably to the prescribed order of studies thorough instruction is given to the students both in the theory and practice of dairying, including the effects of food on milk products, the treatment of milk and cream; the manufacture of butter and cheese, according to the principal systems, with practical demonstrations of the uses of implements and machines.



Side Elevation of Cattle Barn

CHEMISTRY.

The Chemical Laboratory consists of a commodious lecture room, provided with water sinks, pneumatic troughs, tables for illustration and cases for chemicals and apparatus; two analytical laboratories with work tables, desks, shelves and drawers for forty students, water and gas supply, vacuum pumps, hoods, etc., and a balance room containing two pairs of Becker's best chemical balances.

The course embraces inorganic, organic, analytical, agricultural and industrial chemistry. Instruction is given by means of text books, lectures, class illustrations and laboratory practice. A general idea of the course may be gleaned from the following synopsis:

Agricultural Chemistry.—Soil, air and water in their relations to the plant. The food of plants; manures, general and special; chemical principles of tillage, irrigation, systems of rotation and of special crops and farms; the means of determining fodder, values, etc.

Industrial Chemistry.—Lectures on the manufacture of technical products.

Inorganic Chemistry.—This class is instructed in thorough sympathy with the views of Mendeljeff, Luther Meyer and Thomsen on modern chemistry.

Organic Chemistry.—Constitution of organic compounds; hydrocarbons; alcohols; aldehydes, acids and their derivatives; constitution of oils and fats, sugars, starch, cellulose, albuminoids, essential oils, alkaloids, etc.

Practical Chemistry.—During the first term of the junior year the student becomes acquainted with the methods and literature of qualitative analysis. The practical work is taught by laboratory practice and lectures. The second and third terms of this year are devoted to quantative chemical analysis, the instruction being given by similar methods. The laboratory work begins with the determination of metals in simple compounds, followed by analysis of ores, commercial fertilizers, milks, food products, etc. During the last term a short course in arraying is given.

MINERALOGY.

The mineralogical laboratory is provided with work tables, blow pipes and lamps for twenty students, and other facilities for the determination of minerals. This laboratory also contains combustion, crucible, muffle and roasting furnaces for both coal and gas, water supply, hoods, vacuum pumps, ore crusher, grinder and samplers, and is provided with Bensen burners.

The study of mineralogy includes the study of crystallography with the occurrence, properties, forms and uses of the principal minerals. Determinative mineralogy forms the most important part of the course, and is studied practically with the aid of lens, magnet, blow pipe and simple analysis. Especial attention is given to the determination of the minerals and the arraying of the ores of the State.

AGRICULTURAL JOURNALS.

We believe that the mind is strengthened by the intelligent perusal of good papers, and also that the farmer who reads the best agricultural papers will be able to intelligently realize the experience of others. We keep the following list of papers on file for the benefit of agricultural students in particular:

Rural and Workman, Little Rock, Ark.
Arkansas Stockman, Little Rock, Ark.
Breeders' Gazette, Chicago, Ill.
Farmers' Review, Chicago, Ill.
American Farmer, Baltimore, Md.
Southern Cultivator, Atlanta, Ga.
Prairie Farmer, Chicago, Ill,
Texas Stockman, San Antonio, Tex.
Breeders' Journal, Beecher, Ill.
Grange Bulletin, Cincinnati, O.
Rural World, St. Louis, Mo.
Journal of Agriculture, St. Louis, Mo.
Industrialist, Manhattan, Kan.
Country Gentleman, Albany, N. Y.
Canadian Entomologist, Toronto, Ont.
Kentucky Stock Farm, Lexington, Ky.
Live Stock Journal, London, England.
Chemical Society's Journal, London, England.
Royal Agricultural Society's Journal, London, England.

The majority of the above journals are donated by their respective publishers, to whom we are very thankful.

TABLE SHOWING DISTRIBUTION OF TIME IN SHORT AGRICULTURAL COURSE.

SUBJECT.	CLASS.				Total Hours.
	A.	SUB-FRESH.	FRESH. MAN.	SOPHO-MORE.	
English, History, etc	390	195	130	130	845
Mathematics	130	130	130	....	390
General Science	....	195	173⅓	130	498⅓
Agricultural Sciences	....	....	86⅔	260	346⅔
Drawing	195	195	195	195	780
Farm Work	260	260	173⅓	130	823⅓
Laboratory Work	....	....	86⅔	130	216⅔
Shop Work	130	130	130	130	520
Theoretical Work	520	520	520	520	2080
Practical Work	585	585	585	585	2340
Total Work	1105	1105	1105	1105	4420

TABLE SHOWING DISTRIBUTION OF TIME IN B. S. A. COURSE.

SUBJECT.	CLASS.						Total Hours.
	A.	SUB-FRESH.	FRESHMAN.	SOPHOMORE.	JUNIOR.	SENIOR.	
English, History, etc	390	195	130	130	....	43⅓	888⅓
Mathematics	130	130	130	86⅔	..	....	476⅔
General Science	....	195	216⅔	216⅔	260	86⅔	975
Agricultural Sciences	.	..	43⅓	86⅔	260	390	780
Drawing	195	195	195	195	....	....	780
Surveying	....	....	....	.	86⅔	86⅔	93⅓
Farm Work	260	260	173⅓	130	303⅓	303⅓	1430
Laboratory Work		....	86⅔	130	195	195	506⅔
Shop Work	130	130	130	130	....	.	520
Theoretical Work	520	520	520	520	520	520	3120
Practical Work	585	585	585	585	585	585	3510
Total Work	1105	1105	1105	1105	1105	1105	6630

TEXT AND REFERENCE BOOKS.

Soph. Inorganic Chemistry—Richter, Wurtz, Muir, Miller, Roscoe and Schovlemmer.

Organic Chemistry—Remsen, Richter, Beilstein, Roscoe and Schovlemmer.

Analytical Chemistry—Jones, Fresenius, Caldwell and Babcock.

Mineralogy—Brush, Dana.

Agriculture—Warington, Gulley, Allen, Storer, Tanner.

Horticulture—Downing, Bailey, etc.

Veterinary Anatomy—Strangeway, Cheveau.

Veterinary Science—Williams, McFadyer.

Stock Breeding—Miles.

Stock Feeding—Stewart, Armsby.

Dairy Husbandry—Stewart, etc.

DEPARTMENT OF MECHANIC ARTS AND ENGINEERING.

J. M. WHITHAM, Professor.

W. E. ANDERSON, Adjunct Professor.

J. W. MAYO, Instructor in Metal Work.

P. H. BABB, Instructor in Wood Work.

L. C. GARDINER, Instructor in Forge and Foundry.

LEE TREADWELL, Instructor in Field Engineering.

Courses of instruction are offered in

1. Manual Training.
2. Mechanical Engineering.
3. Civil Engineering.

I.—COURSE IN MANUAL TRAINING.

The course in Manual Training, covering four years, is intended to prepare young men to obtain employment in the machine shop, forge and foundry, and at the wood-worker's bench. It replaces the old apprenticeship system, and, at the same time, gives the youth instruction in English, mathematics, science, drawing, the principles of mechanism and steam-engineering. The recent growth of manual training schools, not only here, but in Europe, is phenomenal. The apprenticeship system is now practically obsolete; hence the need of manual training schools. The only opportunity offered to the youth of the State to obtain this instruction is given here.

The theoretical instruction given in the morning is indicated on page 28. That of the afternoon consists of practice for five hours a week in drawing, and ten hours in the training shops.

TABLE SHOWING THE DISTRIBUTION OF TIME IN HOURS IN THE MANUAL TRAINING COURSE.

SUBJECTS.	CLASS.				Total Hours.
	A.	Sub-Fresh.	Freshman.	Sophomore.	
English, History, etc	390	247	130	86⅔	853⅔
Science.	..	143	130	86⅔	359⅔
Pure Mathematics	130	130	130	130	520
Applied Mathematics	...	.	130	216⅔	346⅔
Shop Work	390	390	390	346⅔	1516⅔
Free-Hand Drawing	195	195	..	..	390
Mechanical Drawing	....	....	195	195	390
Laboratory Work		....	....	43⅓	43⅓
Total Theoretical Work	520	520	520	520	2080
Total Practical Work	585	585	585	585	2340
Total Work	1105	1105	1105	1105	4420

The subjects taught in the training shops are, 1, carpentry and joinery; 2, wood-turning; 3, cabinet making and practical carpentry; 4, pattern making; 5, foundry work; 6, forging; 7, metal fitting; 8, machine tool work; 9, care of steam machinery. The distribution of these subjects throughout the four years is shown in the following:—

SCHEME SHOWING COURSE OF SYSTEMATIC INSTRUCTION IN THE WORK SHOPS.

Class.	Section.	First Term.	Second Term.	Third Term.
A	A	Principles of Carpentry and Joinery.	Wood Turning, ½ term. Practical Cabinet and Carpentry Work.	Practical Cabinet and Carpentry Work.
	B	Wood Turning, ½ term. Principles of Carpentry and Joinery, ½ term.	Principles of Carpentry and Joinery ½ term. Practical Cabinet and Carpentry Work.	Practical Cabinet and Carpentry Work.
	C	Principles of Carpentry and Joinery, ½ term. Wood Turning.	Principles of Carpentry and Joinery, ½ term. Practical Cabinet and Carpentry Work.	Practical Cabinet and Carpentry Work.
Sub-Fresh.	A	Forging.	Forging, ½ term. Foundry Work, ½ term	Foundry Work.
	B	Foundry Work.	Foundry Work, ½ term. Forging, ½ term.	Forging
Freshman.	A	Foundry Work.	Pattern Making.	Metal Fitting.
	B	Metal Fitting.	Foundry Work.	Pattern Making.
	C	Pattern Making.	Metal Fitting.	Foundry Work.
†Sophomore		Machine Tool Work—engine lathe, planers, drilling machine, milling machine, etc.	Machine Tool Works—engine lathe, planers, drilling machine, milling machine, etc.	Machine Tool Work—engine lathe, planers, drilling machine, milling machine, etc.

†One student from this class is with engine and boiler.

Junior and Senior students have an advanced course in the various shops.

EQUIPMENTS OF THE MANUAL TRAINING SHOPS.

The training shops are located in the basement of the main building and are conveniently arranged and well equipped. There are four principal shops, viz.: The wood-working, foundry and moulding, the forging, and the machine shops ; also, there are other rooms auxilliary to these, as the engine and boiler rooms, the tool room, cloak room, finishing room, and supply rooms. In equipping these shops, those institutions of a similar nature were studied, compared and improved upon as much as circumstances would permit.

The Wood-Working Shop is equipped with sixteen well appointed work-benches with tools, seven turning lathes, one double circular saw, one scroll saw, one band saw, one reversible shaping machine, one planing machine and one steam glue heater.

The Equipments of Forging Shop at present consist of seven forges of the most improved design, seven anvils and seven sets of tools, consisting of hand hammer, tongs, calipers, steel rule, steel square, hot and cold cutters, file, flatter, fullers, swadges, punches, heading tools, etc. The forges are supplied with power blast, a No. 6 Buffalo blower serving for this purpose. A twenty-four-inch exhaust fan aids the draft of the chimney and serves to keep the room free of smoke and noxious gases.

The Moulding Room and Foundry are equipped with a Collan cupola which will melt from 200 pounds to 1 ton of iron at once, one brass furnace, nine sand troughs and moulders benches combined, nine sets of moulders tools, consisting of heart and square trowel, slickers, rammers, riddle, flask, swab, water pot, shovel, lifters, drawer, spikes, etc., six ladles from 100 to 5 pounds capacity, an assortment of flasks and other necessaries for a complete foundry.

The Equipments of the Machine Shop are ten work benches with vises, sets of tools and closets, one twelve-inch engine lathe, three fourteen-inch engine lathes, one nineteen-inch engine lathe, one speed lathe, one planer 24x24x72 inches, one planer 10x10x24 inches, one Universal milling machine (B. & S.), one double wheel emery grinding machine, one drill press, one grinding stone, and chucks and other appliances for use on the lathes, planers, etc. Each machine has its distinct set of tools. This shop is well equipped with hammers, steel rules, steel squares, spring dividers, chisels, twist drills, taps, dies, tap wrenches, die stocks, reamers, pipe dies, files of all sizes and shapes, wrenches, arbors, lathe dogs, squares, scales, calipers inside and outside, machine and hand-cutting tools, a surface gauge, a Victor micro-meter caliper, a protractor and many other tools.

The Engine Room contains a 25-horse power Westinghouse engine, Blake pump and steel boiler. It is supplied with an indicator, registering steam gauge and other necessary appliances.

CAPACITY OF THE SHOPS.

Fifty students can be accomodated in the shops at one time, divided among the rooms as follows:

Wood-working Room	20
Metal-working Room	14
Forging Room	7
Foundry	7
Tool Room	1
Engine and Boiler Room	1

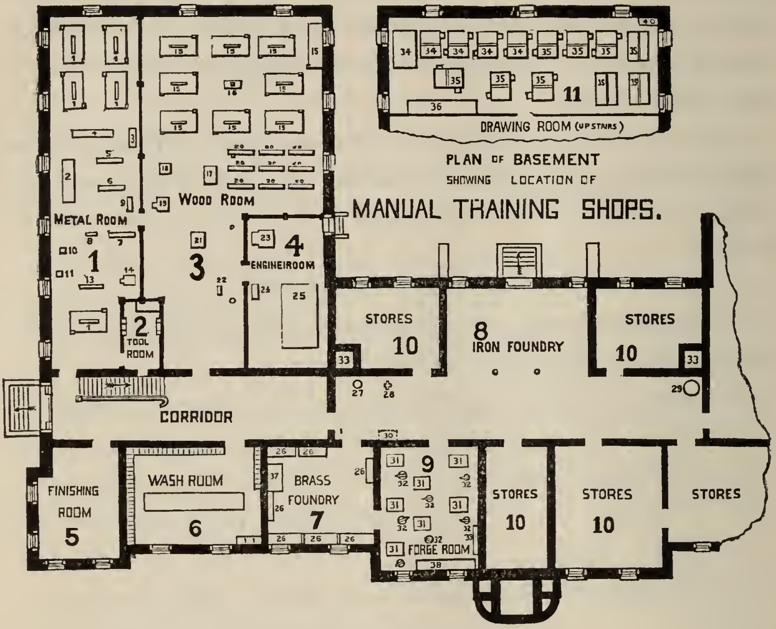

DRAWING ROOM (UPSTAIRS)
11
PLAN OF BASEMENT
SHOWING LOCATION OF
MANUAL TRAINING SHOPS.
METAL ROOM
1
WOOD ROOM
3
4
ENGINEIROOM
2
TOOL ROOM
CORRIDOR
STORES
10
8
IRON FOUNDRY
FINISHING ROOM
5
WASH ROOM
6
BRASS FOUNDRY
7
9
FORGE ROOM

TABLE OF REFERENCE.

1.—Metal Room.

1. Double work bench.
3. Planer 10x10x22.
5, 6, 7. Lathes 14x6 ft.
8. Speed Lathe 10x3 ft.
10. Double emery grinder.
14. Universal milling machine, (B. and S.)
2. Planer 24x24x72.
4. Lathe 19x9 ft.
13. Lathe 12x4 ft.
9. Grindstone.
11. Drill press, 16 inches.

2.—Tool Room.

3.—Wood Room.

15. Double benches.
17. Band saw.
19. Reversible shaping machine.
21. Double circular saw (W., R. and R.)
16. Steam glue pot.
18. Scroll saw.
20. Lathes 12x5 ft.
22. Planer 12 in.

4.—Engine Room.

23. Westinghouse engine, 25-horse power.
25. Boiler 4x16 ft.
24. Blake pump.

5.—Finishing Room.

6.—Wash Room.

7.—Brass Foundry.

26. Moulding troughs.
27. Brass furnace.
37. Core table.
28. Buffalo blower, 26 in.

8.—Iron Foundry.

29. Collan cupalo, 28 in.

9.—Forge Room.

30. Exhauster.
32. Anvils.
38. Bench.
31. Buffalo forges.
33. Chimneys.
39. Closets.

10.—Store Rooms.

11.—Drawing Rooms (up stairs).

34, 35. Double drawing tables.
40. Sink.
36. Drawing board rack.

II.—COURSE IN MECHANICAL ENGINEERING.

Mechanical engineering may be defined as being the application of mathematics to science, with particular reference to the *design and fabrication* of all forms of machinery. Since engineering is the combined science and art of utilizing the forces and materials of nature, and since this utilization is accomplished in nearly all cases by machines, or by processes working through machines, it is evident that *mechanical engineering is the basis of all art and industry.*

The course of study is published on page 27. It is based on the belief that a mechanical engineer should be a mathematician, a scientist, a draughtsman and a mechanic. The course extends over six years, and consists of *3120 hours devoted to theoretical, and 3510 hours to practical instruction.* The distribution of time among the several branches, both theoretical and practical, is shown in the following:

TABLE SHOWING DISTRIBUTION OF TIME IN HOURS IN THE MECHANICAL ENGINEERING COURSE.

SUBJECT.	CLASS.						
	A	SUB-FRESH.	FRESH.	SOPHO.	JUNIOR.	SENIOR	TOTAL HOURS.
English History, etc	390	247	130	86⅔	....	....	853⅔
Science	....	143	130	173⅓	130	86⅔	663
Pure Mathematics	130	130	130	130	130	....	650
Engineering Studies	..	...	130	130	260	433⅓	953⅓
Shop Work	390	390	390	303⅓	43⅓	390	1906⅔
Drawing	195	195	195	195	97½	195	1072½
Surveying, Practice	....	....	......	86⅔	....	....	86⅔
Laboratory Work	....	....	....	....	444 1-6	.....	444 1-6
Theoretical Work	520	520	520	520	520	520	3120
Practical Work	585	585	585	585	585	585	3510
TOTAL WORK	1105	1105	1105	1105	1105	1105	6630

In addition to the above, students may take French and German as elective studies.

The courses in mechanical and civil engineering differ only in the work of the junior and senior years. Even during these years many subjects are included in both. The branches studied are named on page 27, and described on page 57.

III.—COURSE IN CIVIL ENGINEERING.

Civil engineering, as here understood, embraces the location and construction of railroads, canals, water works, sewage systems, foundations on land and in water, tunnels and superstructures; the surveys, improvements and defenses of coasts, harbors, rivers and lakes; the application of mechanics, descriptive geometry and graphics to the design and construction of arch bridges, roofs, trusses and suspension bridges; the design and fabrication of wind, hydraulic and electric motors, and air and heat engines; irrigation and drainage of lands; and the preparation of forms of specifications and contracts.

The course of study, published on page 29, is believed to compare favorably with that in many of the older institutions of technology. It is decidedly a *practical* course, and the graduate is well equipped for the duties of an engineer. He is, also, an excellent draughtsman and mechanic. The time in *hours* devoted to theoretical and practical instruction is shown in the following:

TABLE SHOWING DISTRIBUTION OF TIME IN HOURS DEVOTED TO STUDIES IN THE CIVIL ENGINEERING COURSE.

SUBJECT.	CLASS.						
	A	SUB-FRESH.	FRESH.	SOPHO.	JUNIOR.	SENIOR.	TOTAL HOURS
English History, etc.	390	247	130	86⅔	....	......	853⅔
Science	..	143	130	173⅓	216⅔	86⅔	749⅔
Pure Mathematics	130	130	130	130	130	....	650
Engineering Studies	...	....	130	130	173⅓	433⅓	866⅔
Shop Work	390	390	390	260	....	260	1690
Drawing	195	195	195	195	65	195	1040
Surveying, Practice	....	....	......	130	216⅔	130	476⅔
Laboratory Work	....	......	....	....	303⅓	.....	303⅓
Total Theoretical Work	520	520	520	520	520	520	3120
Total Practical Work	585	585	585	585	585	585	3510
TOTAL WORK	1105	1105	1105	1105	1105	1105	6630

In addition to the above, students may take French and German as elective studies.

ENGINEERING STUDIES FOR THE MECHANICAL AND CIVIL ENGINEERING COURSES.

SURVEYING, as a study, covers two terms. It embraces the care, use and adjustments of instruments, and the elements of land, topographical, hydrographic, mining, city, and geodetic surveying. *Text-Book*—Johnson. The course of surveying practice in the field covers three years, aggregating 476 hours. It is divided as follows:

Sophomore Year.—Use of chain, tape, compass, transit, solar attachment, level, sextant and plane table. The students have exercises in land, city, topographical, mining and hydrographic surveying.

Junior Year.—Road engineering consisting of reconnoisance, preliminary survey, location, profiling, establishing grade, location of curves and turnouts, cross-section leveling, locating slope stakes, measuring embankments and cuts, estimates of volume and materials used in construction, improvement of highways, location and estimates for tunnels.

Senior Year consists of:

1. Sanitary survey of Fayetteville, embracing estimates of material required and cost of construction of a complete sewerage system.

2. Geodetic surveying, embracing location of base line, repeated measurements of base by various methods, location and establishment of signals, manufacture and location of station marks, measuring, distributing errors and correcting angles, tertiary triangulation of the neighborhood, geodetic and precise spirit leveling.

3. Hydraulic surveying, consisting of location of waterworks for the city of Fayetteville, embracing complete details, estimates and costs.

Road Engineering consists of a term devoted to the description of the various forms and methods of constructing roads, streets and pavements, followed by two terms' study of railroad location and maintenance. The *text books* used are

Gilmore, Johnson (for earthwork and topography), Searles (for curves and turnouts), Parson (for maintenance of way). The text books are supplemented by lectures, notes and exercises.

Sanitary Engineering consists of a term devoted to the study of the separate and combined systems of sewerage and constructive details. This is followed by the designing of a sewerage system for Fayetteville, as already stated. *Text books:* Latham, Staley and Pierson.

Hydraulic Engineering is studied with special reference to the design and location of waterworks. It comes at the last of the course, in order that stand pipes, retaining walls, dams, etc., may be properly designed. The study is illustrated by the design of waterworks for Fayetteville. *Text book*, Fanning.

Arches and Dams are made a special study for one term. Greene's work on Arches (graphical) is used, while it is supplemented by the study of existing structures. No text book is used in the study of Dams, but the literature found in the numerous engineering periodicals, and existing structures form the basis for the class instruction.

Bridge Engineering covers two terms and is taught analytically and graphically. Numerous exercises are required illustrating nearly every form of bridge used for highways or railroads. *Text books:* Burr, Waddell.

The constructive details are studied from blue prints, etc., kindly supplied by various bridge building establishments.

Study of Engineering Works:—One term is devoted to the special study of recent engineering structures, prominence being given to the various forms of foundation and tunnels. It also embraces the study of the actual use of coffer dams, caissons, jetties, irrigation canals, etc. *Text book*, engineering periodicals.

Specifications and Contracts:—The forms used in writing specifications and the law of contracts are studied in detail. The text book (Haupt) is supplemented by a study of the specifications and forms for contracts for recent structures.

Materials of Construction cover one term, It embraces the metallurgical treatment of ores, and the methods of testing the various materials used in construction. The text book (Thurston) is supplemented by the study of the various papers on this subject, contributed to the proceedings of the various societies of engineers.

Steam Engineering is taught from a descriptive standpoint to the civil engineering students. *Text book*, Holmes.

For mechanical engineering students it embraces two terms of descriptive study. *Text books*, Holmes, Wilson (boilers); one term on thermodynamics; *text book*, Rankine (the subject of heat having been previously made a special study); one term to boiler design, taught by lectures; one term to steam engine design. *Text book*, Marks, supplemented by lectures, and one term the study of Valve Gears (lectures).

Tests of Steam Machinery:—This is taught without a text book, and consists in the study of the report of tests made by engineers, and the actual testing of machinery used in the shops and elsewhere.

Mechanism:—One term is devoted to the elementary principles. *Text book*, Goodeve, and two terms to the study of machinery and mill work. *Text book*, Rankine.

Mechanics:—One term is devoted to the elements. *Text book*, Peck, supplemented by teacher's notes, and two terms to applied mechanics. *Text book*, Rankine. Mechanics is taught from a purely calculus standpoint.

Friction and Lost Work is studied for one term. Particular attention is given to the tests and comparative values of lubricants, the various forms of bearings, and an analysis of the frictional losses in machinery. *Text book*, Thurston, supplemented by lectures and study of papers contributed to the engineering societies.

Electrical Engineering:—See description on page —, under the heading, Department of Physics. *Text books*, Kemp, Day.

Drawing:—Free-hand drawing is taught during the preparatory years, five hours each week. Instrumental drawing is required during four years for all male students in the college department, irrespective of course of study.

The following college course is for engineering students and is somewhat modified for students in other departments as is shown to be necessary:

Freshman Year:—Instruction in use of instruments, practice in reading, drawings, construction of geometrical figures, elements of mechanical drawing. Great prominence is given to the study of descriptive geometry.

Sophomore Year: —Mechanical drawing during the first term, and topographical drawing during the second and third terms.

Junior Year:—Architectural drawing, linear and isometrical projections.

Senior Year:—Each student makes a design and general and detailed drawing of some structure, such as a bridge or steam engine.

The draughting room is equipped with tables, stools, plainimeter, pantograph and blue print frame. Materials are kept on hand and supplied to students at catalogue rates. Drawing instruments are purchased at 20 per cent discount.

ENGINEERING PERIODICALS.

The following engineering periodicals, nearly all of which are donated to the department, are taken for the use of the students, viz.:

1. London Engineering.
2. Engineering News.
3. The Sanitary Engineer.
4. Scientific American Supplement.
5. Scientific American.
6. Scientific American Architects and Builders' Edition.
7. American Machinist.
8. The American Engineer.
9. The Stationary Engineer.
10. Mechanics.
11. Master Steam Fitter.
12. The Western Electrician.

13. The National Contractor.
14. Fire and Water.
15. The Cincinnati Artizan.
16. Carpentry and Building.
17. Boston Journal of Commerce.
18. The Marine Journal.
19. The Tradesman.
20. The Locomotive
21. Proceedings of Institution of Civil Engineers (England).
22. Proceedings of American Society of Civil Engineers.
23. Proceedings of American Society of Mechanical Engineers
24. Proceedings of American Institute of Mining Engineers.
25. Journal of the Association of Engineering Societies.
26. Journal of the New England Waterworks Association.
27. Proceedings of the American Waterworks Association.
28. Proceedings of the Master Car Builders' Association.
29. National Car and Locomotive Builder.
30. Proceedings of Philadelphia Engineers' Club.
31. Proceedings of American Railway Master Mechanics' Association.
32. Proceedings of Roadmasters' Association of America.
33. Proceedings of Engineering Societies in Canada, Michigan, Ohio, Indiana, Illinois, Iowa, Missouri, Arkansas, etc.

DONATIONS.

In addition to the numerous papers just named, the following donations have been received recently, viz.:

15 Vols. of Proceedings of American Institute of Mining Engineers.
12 Vols. of Proceedings of American Society of Civil Engineers.
8 Vols. of Proceedings of American Society of Mechanical Engineers.
9 Vols. of Proceedings of Institution of Civil Engineers (of England).
15 Vols. of Proceedings of Master Car Builders' Association.

For the Engineering Museum—

1 Dean Steam Pump, and Blue Prints.
1 Blake Steam Pump.
1 Knowles Steam Pump.
1 Thompson Water Meter.
1 Crown Water Meter.
1 Hersey Water Meter.
150 models from U. S. Patent Office.
1 Section of Vitrified Culvert Pipe, 18x30 (Blackmer & Post).
1 set of samples of Rubber Hose and Belting (N. Y. Belting and Packing Co).
3 complete sets of Bridge Drawings (Phœnix and King Bridge Companies).

THE GORDON ENGINEERS' CLUB.

This club was organized in September, 1887. Its members pursue the engineering courses. Weekly meetings are held in the engineers' reading-room, at which time lectures are given by the students in turn. The subjects recently discussed are "The Vosburg Tunnel," "Maintenance of Way," "Manufacture of Bessemer Steel at Chicago," "Construction of Dams," etc.

During this session, the following lectures have been delivered before the club, in addition to those given by the students, viz.:

1. "Engineering as one of the Learned Professions," by Prof. J. B. Johnson, St. Louis, Mo.

2. "Engineering Education," by J. A. L. Waddell, consulting engineer, Kansas City, Mo.

3. "How to Become a Successful Engineer," by J. A. L. Waddell, consulting engineer, Kansas City, Mo.

4. "Design of Highway Bridges," by J. A. L. Waddell, consulting engineer, Kansas City, Mo.

5. "Inter-Oceanic Ship Transfer Problem," by Robert Moore, consulting engineer, St. Louis, Mo.

6. "Arkansas River Improvements," by H. S. Taber, Captain of Engineers, U. S. Army.

The Gordon Club may be considered as a chapter of the Arkansas Society of Engineers, Architects and Surveyors, since many of its members belong to the *student grade* of that society.

PHYSICS.

J. M. Whitman, Professor.
W. E. Anderson, Adjunct Professor.

This course embraces recitations upon text-books, lectures, class illustrations and experiments in the Physical Laboratory. The general course extends throughout the Freshman year, and consists of the study of the branches known as heat, light, sound, electricity and magnetism, and mechanical powers.

Heat is studied during one term of the Sophomore year as being essential to the engineering course, while, in the Senior year, electrical engineering is taught.

Text and Reference Books:—Worthington's Physical Laboratory Practice, Meyer's Experiments in Light and Sound, Pickering's Physical Measurements, Olmstead's Natural Philosophy, Tyndall on Light, Sound and Heat, *Larden's Heat*, Stewart's Heat, Sylvanus Thompson's Electricity, Day's Electric Light Arithmetic, Day's Exercises in Electrical Measurements, Murdock's Notes on Electricity and Magnetism, *Kempe's Hand-Book of Electrical Testing*, *Ganot's Physics*.

DEPARTMENT OF PSYCHOLOGY, ETHICS AND POLITICAL ECONOMY.

Acting President Murfee.

PSYCHOLOGY AND ETHICS.

These important studies are taught inductively, no theory or doctrine being urged for acceptance which is not based upon a philosophical induction from the facts of consciousness. The student is taught to subject every statement of fact or principle to the test of his own experience. The fullest and freest discussion of opposing views is encouraged.

POLITICAL ECONOMY.

The aim is to give a succinct statement of the undisputed principles of political economy, and to discuss conflicting views with all possible fairness.

TEXT AND REFERENCE BOOKS.

Psychology—Bascom, Mahan, Porter, Sir William Hamilton.

Ethics—Alexander, Dagg, Bascom, Porter, Calderwood.

Political Economy—Chapin, Mill, Say, Perry.

DEPARTMENT OF MATHEMATICS, LOGIC AND ASTRONOMY.

E. H. Murfee, Professor.
J. F. Howell, Assistant.
G. W. Droke, Assistant.

MATHEMATICS.

This subject should be taught both practically and logically, thus promoting scientific investigation and mental discipline. It is not enough to find "answers," but the deductions must be based on established principles. First, the pupil performs the work in imitation of the teacher or author; then comparing facts learned, he reasons on the subject, consults the text and book of reference, makes the deduction, and applies the law to new cases. The power of original investigation and the faculty of invention are thus strengthened, and the student, by the inductive process of combining known principles and making new deductions, can anticipate the author in his demonstrations.

For admission into the Freshman Class, the applicant must pass satisfactory examination in Arithmetic and in Algebra to Quadratic Equations. It is desirable that he should have studied three books in Geometry, and that he should have been thoroughly drilled in Mental Arithmetic.

All students must supply themselves with drawing instruments; for much attention is paid to original investigations, in which at least the dividers and protractor are essential.

TEXT BOOKS AND BOOKS OF REFERENCE.

Algebra—Robinson's University, Wentworth's Complete, Wells' University.

Geometry—Wentworth, Loomis, Welch and Chauvenet.

Trigonometry—Schuyler, Wells and Wentworth.

Analytical Geometry—Loomis and Todhunter.

Calculus—Loomis, Church and Byerly, Williamson.

ASTRONOMY.

A term is devoted principally to Descriptive Astronomy, together with as much Practical as possible in so short a period.

The subject is made interesting and profitable by the use of maps, globe, astral lantern, equatorial telescope, sextant and solar compass.

Text and Reference Books: Olmstead's College Astronomy, Bowen's Astronomy of Observation, Newcomb and Holden's Astronomy, Coffin's Navigation and Nautical Astronomy, the Nautical Almanac, Loomis' Astronomy; periodical, Siderial Messenger.

LOGIC.

Logic is taught both from text-books and by lectures. Students are required to show its application in various scientific investigations. Essays from different authors are analyzed and discussed, with a view to the appreciation of sound reasoning and the detection of fallacies. Original discourses are required of students to impress the principles taught. In this way a subject, ordinarily regarded as dry, is made of the liveliest interest.

Text Books and Books of Reference: Jevon-Hill, McCosh, Mill and Hamilton.

DEPARTMENT OF HISTORY, ENGLISH, FRENCH AND GERMAN.

Howard Edwards, Professor.
W. N. Crozier, Instructor in English.
Miss Ida Pace, Instructor in English.

ENGLISH.

The work of the English course is assigned to the Freshman, Junior and Senior Classes.

For entrance into the Freshman class a full knowledge of elementary grammar, composition, and analysis, is required, and the student is expected to be able to express himself with a fair degree of ease and clearness.

The work of the Freshman year is obligatory in all courses of study. It will consist of two terms on Rhetoric and one term on Historical Grammar. Every effort will be made to render the course rich in practical results. To this end, continuous graded exercises or essays, promptly applying and drilling in the principles learned in the text book, constitute a prominent feature thereof.

The Junior year of the course is obligatory only on the students of the A. B. course. It consists of two terms devoted to the study of the History of English Literature, together with original work on as many of the masterpieces of the language as the varying time will allow, and one term employed in the detailed consideration of Chaucer and Shakespeare.

The Senior year is philological in its bent. It will consist of one term on Anglo-Saxon, one term on Middle English, and one term on English Philology as such. The written exercises in the Junior and Senior year will consist of original investigation of questions connected with and forming a vital part of the class work. In this kind of work, the Library, containing as it does, the masterpieces of our language from the earliest times down, is of invaluable assistance, and forms the main and most valued auxiliary of instruction. Students are referred, as far as possible, to the original sources, and taught to investigate for themselves.

Text Books: Clarke's Practical Rhetoric, Morris' Historical English Grammar, Stafford Brooke's Primer of English Literature, Ward's English Poets, Sweet's Anglo-Saxon Primer, Sweet's Reader, Morris' Specimens of Early English, Earle's Philology.

HISTORY.

The work in History is done entirely in the Sophomore year. One term is devoted to each of the usual divisions of Universal History. While, by the use of a text book, and a rapid course of lectures, the general flow of events throughout the world is followed, there is, besides assigned to each student a specific period and region, which during the years' time he is required to work up thoroughly from original sources, as far as the material at hand will allow. The work of the student in the province assigned him is, at stated intervals, presented to the class in the form of an essay. Here again the Library, which is comparatively rich in historical works, is an invaluable auxiliary to the work of the course. The department is also provided with a number of accurate and beautiful maps.

The years' work in History is required in all courses except the Short Agricultural, the Manual Training, the Mechanical Engineering, and the Civil Engineering courses, when only two terms are required.

Text Book: Labberton's Historical Atlas.

GERMAN AND FRENCH.

In consequence of the legislative enactment which requires for any course containing a language other than English, the payment of the yearly tuition fee of $10, the German and French languages have not been made obligatory in any of the courses; yet they are regarded by both the Board and the Faculty as essential parts of any scientific course, and opportunity is given the students of all courses to take them. Two years are assigned to each language. No entrance requirement is made. French is commenced in the Freshman year, and the work of the class is directed to the obtaining of a thorough familiarity with the forms of the language, and a large and practical vocabulary. At the end of the Freshman year the student is expected to be able to read ordinary prose at sight; and has all the material necessary to enable him, with facility and quickness, to learn to speak the language, if he so desires.

The Sophomore class is engaged in reading and studying the classics of the language, the history of the language and the study of the syntax and idioms, and a hurried view of the historical grammar complete the course.

German is begun in the Junior year, and the plan pursued is the same as that of the Freshman year in French. The Seniors complete the study of German, following the line of study pursued in French by the Sophomores. Daily practice in translating into French and German, and writing from dictation form a prominent feature of class work.

Text Books: Whitney's French Grammar, Lectures on French Literature, Selections from Modern French Literature, Historical Grammar (Brachet), Harrison's Syntax, Selections from French Classics, German Grammar (Jaynes-Meissner), Lectures on German Literature, Grimms' Maerchin, Brandts' German Grammer, Selections from the German Classics.

N. B.—French and German weeklies are taken by the Library and are accessible to students. The current literature in English is also well represented. All three are made useful auxiliaries in the department.

DEPARTMENT OF BIOLOGY AND GEOLOGY.

Professor Simonds.

BIOLOGY.

The course of instruction in the Biological Sciences includes Elementary Botany, Plant Analysis, Structural and Microscopic Botany, Elementary Physiology, Human Anatomy and Physiology, Elementary Zoology, General Zoology, Entomology, and Special Research.

TEXT BOOKS.

In Botany—Gray's Series, Bessey's Botany.

In Zoology—Holden's Zoology, (Elementary), Packard's Zoology, (Advanced), Nicholson's Zoology, (Advanced).

GEOLOGY.

The course of instruction in Geology includes Dynamical, Structural and Historical Geology, Survey Methods and Economic or Applied Geology. Field work is required of all students taking the General Course. The region adjacent to Fayetteville will be carefully studied and mapped, and that knowledge acquired which can only be attained by a personal and minute study of strata.

Text Book:—LeConte's Elements of Geology.

Frequent references are made to various works on Natural History and Geology contained in the University library, and the student in this department is expected to take advantage of the opportunity here offered to acquaint himself with the literature of the subject he may have under consideration.

The lecture room and laboratory are situated on the third floor of the main University building, north end. The laboratory is well equipped with new and costly microscopes, both dissecting and compound, and such other appliances as are necessary for carrying on Biological or Geological research.

TABULAR STATEMENT.

Sub-Freshman—Elementary Zoology, Elementary Botany, Elementary Physiology.

Freshman—General Zoology, Plant Analysis, Anatomy and Physiology, (Advanced).

Sophomores—Structural and Microscopic Botany, Entomology, Laboratory.

Juniors—Geology, Laboratory.

Seniors—Special Biological Work, Economic Geology.

ANCIENT LANGUAGES.

C. H. LEVERETT, Professor.
M. DANAHER, Instructor.

The subjects taught in this department are the Latin Language and Literature and the History of Rome, the Greek Language and Literature and the History of Greece. Authors are read in the order of their difficulty, and neat written translations are required at stated intervals. The grammar and idioms of these languages are carefully studied and compared with those of English and other languages.

Marked attention is paid to the rendering of English into Latin and Greek. In the lower classes the best manuals for Latin and Greek composition are used; for the higher classes carefully graded exercises are prepared by the professor.

Due prominence is given to the study of the Latin and Greek metres. The grammars are made the basis of this instruction, but fuller explanation is given in lectures.

For admission into the Freshman Class, students should be able to read at sight and parse any passage in two books of Cæsar; must know thoroughly all the declensions and conjugations, regular and irregular, of the Latin Grammar and the elementary principles of Syntax; and should be able to translate easy sentences from English into Latin.

No Greek is required, at present, for admission.

LATIN.

Freshman Class—Gildersleeve's Grammar, Jones' Latin Prose Composition, Cæsar (Greenough or Kelsey) 2 Books, or Nepos (C. & S.) 35 pages, Virgil (Greenough) 3 Books of Aeneid and Selections from Eclogues, Pennell's or Smith's Smaller History of Rome.

Sophomore Class—Gildersleeve's Grammar. Jones' Prose Composition, Cicero's Orations (Harkness) 50 pages, Odes of Horace (MacLeane), Livy (Lincoln) 50 pages.

Junior Class—Gildersleeve's Grammar, Prose Composition, Livy 60 pages, Satires and Epistles of Horace (1500 lines) Tacitus (100 pages).

Senior Class—Gildersleeve's Grammar, Original Exercises, Cicero's Moral Works. Juvenal (Leverett or MacLeane), Roman Literature.

Books of Reference:—Harper's Latin-English Lexicon, White's English-Latin Lexicon, Classical Dictionary, Classical Atlas, Zumpt's, Madvig's and Roby's Latin Grammars.

Other authors may occasionally be substituted for those above when a change seems beneficial: (*e. g.*) Sallust, Ovid, Catullus, Tibullus, Propertius, Pliny, Plautus.

GREEK.

Freshman Class—Goodwin's Grammar, Whiton's Lessons, Xenophon's Anabasis (Goodwin) 6 Chapters.

Sophomore Class—Goodwin's Grammar, Jones' Prose Composition, Xenophon's Anabasis 3 Books, Lysias 3 Orations, History of Greece.

Junior Class—Goodwin's Grammar, Jones' Prose Composition, Herodotus (Mather) 40 pages, Homer's Iliad (Pratt and Leaf) 3 Books, Demosthenes 40 pages, Plato.

Senior Class—Goodwin's Grammar, Original Exercises, Thucydides 1 Book, Euripides 1 Play, Sophocles 2 Plays, Greek Literature.

Books of Reference:—Liddell and Scott's Greek-English Lexicon (7th Oxford Edition), Yonge's English-Greek Lexicon, Classical Dictionary, Classical Atlas, Goodwin's Moods and Tenses, Hadley's or Curtius' Grammar.

Other authors may be substituted for the above.

NORMAL DEPARTMENT.

Professor Howell.

The design of this department is to train teachers for the schools of the State. Technical instruction is begun in the Sub-Freshman and completed in the Sophomore class, satisfactory completion of the course entitling the student to a Normal Diploma conferring the degree of Licentiate of Instruction.

The course includes all the branches required for State license by the school laws of the State, and former graduates after successful experience in actual teaching for a reasonable time have been granted State license by the State Superintendent of Public Instruction without examination. After completing the Normal course, students may take up in the Junior class the work of one of the other courses and compete for the corresponding degree.

Psychology is made the basis of technical instruction, a brief outline of this branch being given in the Sub-Freshman class, and special attention being paid to the analysis of the intellectual processes. Students are encouraged and trained to study their own mental phenomena and to note evidences of similar phenomena in the conduct of others, especially of children. The fundamental principles of teaching as deduced from psychical facts are presented, as also general methods of teaching based on these principles. Students are required to give much attention to principles as inculcated and to methods as illustrated in approved pedagogical books and journals, a good selection of which is free of access in the University library. At the same time they are taught to avoid a slavish dependence upon the methods of others and encouraged to devise methods of their own. Methods of teaching the common branches are illustrated with the classes, the members being selected alternately to conduct recitations and free criticism and discussion being allowed after each.

The idea is continually made prominent that character-building should be the grand aim of the teacher. Near the end of the course a more extended outline of psychology is given, covering the more important facts of the science with which a teacher should be familiar.

Further, the aims are :

1. To unify the work of our State educational system by bringing the secondary schools and the University into close sympathy with each other.

2. To teach pupils how to organize, grade and discipline the various kinds of schools.

3. To give them a knowledge of school law, and especially of the duties of teachers as officers of the State.

4. To impart to them a valuable summary of the history of education.

5. To aid them in creating for themselves high educational ideals based on the principles of Christianity.

Text Books: White's Pedagogy, Painter's History of Education, Baldwin's School Management, Palmer's Science of Education, Dewey's Psychology.

PREPARATORY DEPARTMENT.

Students are not admitted into the lowest Preparatory class until they are thoroughly familiar with the fundamental operations of Arithmetic, viz.: Addition, Subtraction, Multiplication and Division. In Reading, they must be able to understand and intelligently render specimens of the grade of the Fourth Reader; must have a knowledge of Primary English Grammar, Primary Geography, the rudiments of Penmanship, and the spelling of ordinary words of the grade of the Fourth Reader.

Much importance is attached to Mental Arithmetic as a means for developing the power of analysis, and for strengthening the mind. Both oral and written exercises are required daily.

Daily exercises in Penmanship are required in the B class.

In the A class, Geography is taught during the first term and United States History during the second and third terms. Latin is begun by those who propose a Classical course or the complete Normal course.

Classical students are thoroughly drilled in the elements of Latin Grammar and are carried through a Reader and two books of Cæsar, or the equivalent, by the close of the Sub-

Freshman year. Students are exercised by frequent translations from the English into Latin.

Algebra and Geometry are begun in the Sub-Freshman year. In the former students are thoroughly drilled in the elementary principles and required to master everything to equations of the second degree. In the latter three books are studied during the year.

Free-hand drawing forms a part of the regular curriculum and is begun in the A class. Drawing has a disciplinary, as well as a practical value, and also tends to refine the taste.

Elementary science is taught throughout the Sub-Freshman year. The experience of the past in giving instruction in this line of study has been most satisfactory. The classes have been taught by the Professors of Chemistry and Biology, who have sought to give such an outline of scientific facts and principles as would prove valuable both to those students who propose to take a fuller course, and to the larger number who drop out of school before reaching the Collegiate Department.

TEXT BOOKS:

Algebra—Robinson's University.

Arithmetic—Barnes' National, Rays' Practical, Thompson's Intellectural.

Book-Keeping—Bryant and Stratton.

Botany—Grays' How Plants Grow.

Chemistry—Miller or Houston.

Drawing—White's Industrial.

English—Chittenden's Composition, Meiklejohns' English Language, Welshs' Grammar.

Geography—Appletons' Physical, Harpers' School.

Geometry—Wentworth.

History—Barnes' United States.

Latin—Jones' First Lessons, Gildersleeves' Grammar and Reader.

Penmanship—Harpers' Copy Books.

Physiology—Martins' Human Body.

Reading—Barnes' and Swinton.

Zoology—Holder.

MILITARY DEPARTMENT.

PROFESSOR FLETCHER, U. S. A.

The military officers of the University consist of the President, Commandant and such assistant professors as may be assigned to duty in this department by the President. The President is head of the department, and issues, from time to time, such general and special orders as he deems necessary to the efficiency of the military exercises and to the enforcement of order in the buildings and on the grounds.

This department is designed to impart to each male student, not physically incapacitated to bear arms, theoretical and practical instruction in the school of the soldier, of the company, and of the battallion, and thereby furnish the State with a body of young men qualified to organize its militia.

The male students are required to drill, because an act of Congress for 1862, which appropriated lands to establish the University, provided that the leading branches taught should be, in addition to the usual course of study prescribed in universities, "Military Science and Tactics."

Besides, the military drill is a superior health-giving exercise, and promotes physical development, manly carriage, neatness, precision, order, and a habit of obedience, which is a valuable aid in the enforcement of discipline.

The entire body of male students is divided into companies, which are officered by cadets, selected for proficiency in drill, good deportment and scholarship. The cadet officers are regarded as assistants in the enforcement of discipline, and their orders, while on duty, are considered as duly authorized, and must be obeyed accordingly.

Cadet officers are expected and required to be examples in military deportment and general good conduct.

A neat uniform, with brass buttons and suitable trimmings, is required to be worn by all males.

Parents and guardians will save money by postponing the purchase of winter suits for their children and wards until they arrive at Fayetteville.

At the competitive drills, at the end of the first term, December 8, 1887, "C" Company won the honor of carrying the Battallion Colors during the remainder of the session.

OFFICERS AND NON-COMMISSIONED OFFICERS OF THE BATTALION.

E. L. Fletcher, *First Lieut. 13th U. S. Infantry, Colonel.*
G. C. Shoff, *First Lieut. and Adjutant.*
W. N. Crozier, *First Lieut. and Quartermaster.*
W. E. Dickson, *First Lieut. and Ordnance Officer.*
G. A. Humphreys, *Sergeant-Major.*

"A" COMPANY.

G. A. Warren, *Captain.*
M. Danaher, *First Lieutenant.*
D. C. B. Aikin, *Second Lieutenant.*
J. A. Taff, *First Sergeant.*
H. E. Williams, *Sergeant..*
W. R. Hervey, *Sergeant.*
S. A. Horton, *Corporal.*
J. Humphreys, *Corporal.*

"B" COMPANY.

J. H. Hobbs, *Captain.*
W. W. Powell, *First Lieutenant.*
J. C. McNeeley, *Second Lieutenant.*
E. Treadwell, *First Sergeant.*
S. Leverett, *Sergeant.*
W. L. Reed, *Sergeant.*
R. Duncan, *Corporal.*
J. D. Perry, *Corporal.*

"C" COMPANY.

Press. Boles, *Captain.*
N. F. Drake, *First Lieutenant.*
L. F. Fishback, *Second Lieutenant.*
R. D. Harris, *First Sergeant.*
Wallace Oliver, *Sergeant.*
Oliver Sellers, *Sergeant.*
A. J. Newman, *Corporal.*
John H. Atkins, *Corporal.*

ART DEPARTMENT.

Miss Lyon, Instructor.

The Young Ladies' Industrial Art Studies embrace drawing, designing, modeling, wood carvings, repousse, and other decorative work. They teach the art of producing an infinite variety of objects, both useful and ornamental; in short, *whatever lies at the foundation of the industries dependent alone upon human invention, skill and handiwork.*

There has been excellent progress during the past three sessions in drawing, designing, embroidery, brass-work and wood-work; and the young ladies begin to appreciate the importance of training the eye and hand in working material things for pleasure and profit.

Fine Art Studies will constitute hereafter an optional course, to be paid for at the teacher's rates, which are as follows:

Drawing, per term, two lessons per week	$10
Painting, per term, two lessons per week	12
Wood Carving, per term, two lessons per week	11

COURSE IN PAINTING.

	FIRST TERM.	SECOND TERM.	THIRD TERM.
FIRST YEAR	Drawing from Flat. Perspective.	Drawing from Flat. Object Drawing.	Drawing from Flat. Object Drawing. Designing. Wood Carving.
SECOND YEAR	Drawing from Casts. Wood Carving. Water-Color Painting.	Drawing from Casts. Water-Color Painting.	Drawing from Casts. Drawing from Life Water-Color Painting.
THIRD YEAR	Drawing from Nature Drawing from Life. Oil Painting.	Drawing from Life. Oil Painting. History of Art.	History of Art. Oil Painting.

MUSICAL DEPARTMENT.

MISS KING, INSTRUCTOR.

PIANO FORTE.

This course will require six years for completion, if the pupil possess marked talent and unceasing energy.

FIRST YEAR.

Studies of the first principles of music, five-finger exercises, technic scales, and such studies as will prepare the pupil for the introduction of light classics.

SECOND YEAR.

Practical exercises and *etudes* of Duvernoy, Czerny, etc., in connection with the latest studies in technic. Grade 2.

THIRD AND FOURTH YEARS.

Advanced technical studies of Loschhorn, Plaidly, etc., and studies of Heller, Clementi and Bach preparatory to moderately difficult classical composition.

FIFTH AND SIXTH YEARS.

Advanced studies of Beethoven, Clementi, Bach, etc., and difficult compositions of Schumann, Liszt, Chopin, Hayden, etc.

VOCAL CULTURE.

FIRST YEAR

Will be devoted exclusively to forming register and to producing evenness and natural tones of voice in register. Bassini's Art of Vocalization will be the studies required.

SECOND AND THIRD YEARS.

Pronunciation, timbre, science and art of breathing (diaphragm and clavicular), and art of phrasing; studies of Conconi and Marche, with light selections from the operas.

FOURTH AND FIFTH YEARS.

Messo di Voco, Portamento, and other vocal embellishments; studies of Panolka, Beethoven, etc., with the more dfficult selections from the operas and classic compositions of Mendelssohn.

SIXTH YEAR

Will embrace the first course in Opera Dramatic.

VIOLIN.

FIRST YEAR.

Practice of bowing, finger exercises, Manzas' Instructor.

SECOND YEAR.

Etudes of Dancla and arrangements from the operas.

THIRD YEAR.

Kaiser's Etudes, Sonatas by Hayden, Schubert, etc.

FOURTH YEAR.

Krautzer's Etudes and compositions by DeBeriot, Kreutzer, etc.

TERMS,

PER SESSION OF TWELVE WEEKS.

Piano Forte	$12 00
Voice Culture	12 50
Violin or Guitar	12 00
Thorough Bass and Harmony	5 50
Theory and Composition	7 50
Use of Piano one hour every day	2 35

For one lesson per week the rates are half the above, except for the use of piano.

Tuition must be paid invariably in advance.

All pupils are required to take theory as well as practice.

No deductions will be made on account of absence from recitations except in cases of prolonged sickness; then the loss will be shared equally between student and teacher.

By a resolution of the Board of Trustees, at its recent meeting, the students of the Music and Art Departments, who have not matriculated in other departments, will hereafter be required to matriculate and pay the usual fees, and to be subject to the regulations applicable to other students.

LOCATION.

The Arkansas Industrial University is located within the corporate limits of the town of Fayetteville, Washington county. The location is thought to be unsurpassed by any other locality in the State in salubrity of climate, beauty of surrounding scenery, fertility of soil, variety and perfection of agricultural and horticultural productions, and in the morality and intelligence of its people.

PROPERTY

The property of the University consists of the proceeds of the munificent grant of land by Congress, the bonds of Washington county, and of the town of Fayetteville, the appropriations made by the State, and the University farm and lands—amounting in all to $300,000 in value.

The Main Building is one of the most magnificent structures of the kind in the south. A cut of it and a brief description can be seen on the second page of this catalogue.

ACCESSIBILITY.

Students may reach Fayetteville from both the north and the south by double daily trains ou the Texas branch of the St. Louis & San Francisco Railroad, which now connect on the south with the Little Rock & Fort Smith Railroad at Van Buren.

Students, on arriving at Fayetteville, must report at once to the President of the University. No student will be allowed to recite in any class until properly enrolled, but will be held responsible for his conduct from the time of his arrival in Fayetteville.

WITHDRAWAL OF STUDENTS.

Parents or guardians who wish to withdraw their children or wards from the University, should write to the President of the Faculty, stating their wishes. Unworthy students sometimes deceive the Faculty by pretending that their parents desire them to return home. No honorable discharge will be given to a student under age, who is unable to produce the written application of his parent or guardian for his withdrawal, or if his number of demerits shall exceed the proportion of two hundred allowed during the session. Nor will an honorable dischange be given to a student, under censure of any kind, whether for neglect of duty, or other cause, even though he may have the consent of his parent or guardian for his withdrawal from the University.

EXPENSES.

Students are required to board at such places as are approved by the Faculty, and are under the supervision of the President of the University. No change of boarding house will be allowed, except at the end of each term, unless under extraordinary circumstances, nor without permission of the President.

If at any time the influence of a boarding house be found pernicious, boarders will be removed at the instance of the Faculty.

Board, including fuel, lights and washing, may be had with families living in or around Fayetteville, at from $12 to $16 per calendar month. Day boarding is sometimes obtained at from $8 to $10 per month.

In order to lighten the expenses of students of limited means, the Board of Trustees, two years ago, authorized the Faculty to open a boarding house on the College grounds, where good substantial fare might be furnished to from forty to fifty boys at cost. To effect this purpose, the old Refectory was thoroughly repaired, and the dining-room and kitchen furnished at the expense of the University. At the request of the Faculty, one of the professors took charge of the establishment at the opening of the first session, and another at the beginning of the second session. Under their supervision it was so conducted that good substantial table board was furnished the students for less than $8 per month.

Students who board on the grounds are expected to provide their own furniture, fuel and lights. Before entering the boarding house they are required to promise to conform to such regulations as to study, the preservation of order, visiting, leaving their quarters, and the care of their rooms, as may be prescribed by proper authority.

Tuition charges for students who have not beneficiary appointments, have been reduced to $10 per session of forty weeks.

All *new* students, on entering, are required to pay a matriculation fee of $5.

No student will be enrolled until all fees are paid, and no tuition fees will be refunded, except in cases of sickness causing continuous absence of not less than six weeks.

LITERARY SOCIETIES.

In the Collegiate Department there are two literary societies, the "Mathetian" and "Philomathean." Students who are members of the Sub-Freshman class, are also eligible to membership in these.

Literary societies may be organized in the Preparatory Department under proper restrictions. At present there is but one in operation, the Garland Society.

LIBRARY AND READING ROOM.

A small but well-selected collection of books, numbering about 4000 volumes, constitute the Library of the University. Of this number a large percentage is made of valuable and costly technical works for the various departments of the Institution, and the necessary purchase of these has absolved a large part of the yearly appropriations, and seriously retarded the numerical growth of the Library.

Yet in no sense has the purchase of a full collection of technical works been attempted in any department. The most that it has been possible to do, has been to provide for the pressing needs of the hour by the thoughtful and careful expenditure of the small amount of money yearly assigned to each department. One of the most obvious and pressing necessities of the University today is a large and liberal appropriation from the Legislature, to provide a library suitable to the needs of the Institution and the standing of the State. A complete technical library, kept up with the course of investigation and discovery by constant additions, has always been recognized by competent authorities as one of the most indispensable means and accessories of instruction even in the most practical schools. Agriculture and Mechanics have their vital literature, their full line of necessary books of reference, just as much as have Chemistry and Engineering, or Physics and Astronomy, or Mathematics and English.

Moreover, History and Polite Literature have their just and beneficent claims upon us. It is neither creditable or pleasant to read in the report of the Commissioner of Education that Kansas, admitted to Statehood in 1861, contains libraries numbering in the aggregate 173,661 volumes, while Arkansas, admitted in 1836, can number in public libraries throughout all the broad extent of her territory only 48,173 volumes. This is a bad showing for the reading proclivities of our people, and the matter deserves careful consideration.

To remedy the matter, where can a better beginning be made than right here at the State University, where the youth, coming up from all parts of the State, may learn, under careful and competent instructors, to value and to use a well-equipped library, and may carry home with them the desire to diffuse and strengthen in the various towns and villages the taste for more and better literature? Thus all through the State small libraries will spring up here and there, and taking root, will grow and produce for the State a hundred-fold harvest of thoughtful public spirit and intelligent patriotism.

Private philanthropy might be of much service in this matter, and probably would be so, if our needs were properly known. Any donation from private persons will be reported to the Board of Trustees and receive proper acknowledgment.

Besides the nuclei of technical libraries for the various departments, as already mentioned, we have a small but carefully selected collection of books on general literature. Additions to the library are made annually from a small fund set apart by the Board of Trustees.

Nearly all the newspapers of the State of Arkansas, and several from other States have been generously furnished to the Library, either by the publishers or other friends of the University. The best magazines of America, and some from England, France and Germany, are also purchased. All these are kept on file in the Library, and students have access to them, as well as the books, at certain hours each day. No Library fee is charged, but a deposit of $2 is required to insure proper care of the books taken from the Library.

APPARATUS.

The University is supplied with no inconsiderable amount of apparatus for illustrating the different sciences, and for the prosecution of original work. Most of the departments are well equipped for practical laboratory and field work.

MUSEUM.

The cabinet of minerals consists chiefly of a collection of State minerals, contributed by various parties of the State, and by the professors; but it has been recently enlarged by purchase, and embraces also specimens of value from other States.

There has been constructed an herbarium case large enough to hold the indigenous plants of North America and such exotics as are of economic value. It will be the work of years to complete a collection of the plants of North America, but the work is progressing. A valuable addition has been made by the purchase of Prof. Harvey's collection of the plants of Arkansas, embracing more than 2500 specimens.

There are about 500 species of animal specimens for illustrating the various parts of zoology.

Collections in all the departments are slowly accumulating.

Contributions of minerals, fossils, Indian relics and rare curiosities are solicited.

APPOINTMENT OF BENEFICIARIES.

All appointments should be completed, if possible, before the opening of the autumn term. The County Judges, who make the appointments, should prepare duplicate notifications of appointments, one of which should be forwarded to the President of the University, and one to the Secretary of the Board of Trustees; and in case the appointee fails to appear at the University within twenty days after an appointment (except in case of sickness) he or she will be regarded as having declined the appointment, in which case it will be the duty of the President of the Faculty to notify the person making the appointment of such failure, and he, in turn, should make another appointment as soon thereafter as possible; such other appointee being required to appear at the University as soon as possible after appointment. The President of the Faculty shall continue to notify appointing officers until their respective number of appointees make their appearance at the University.

All beneficiary students should be present at the opening of the autumn term; and unnecessary delay, either of old students returning, or new ones reporting, will lead to the forfeiture of their appointments.

QUALIFICATIONS.

The attention of County Judges is called to the fact that *no Beneficiary Students will be admitted unless they have the following qualifications:*

Students are not admitted until they have become familiar with the fundamental principles of arithmetic, viz.: addition, subtraction, multiplication and division. In reading, they must be able to understand and intelligently render specimens of the grade of the Fourth Reader, must have a knowledge of primary English grammar, primary geography, the rudiments of penmanship, and the spelling of ordinary words of the grade of the Fourth Reader. These qualifications are the test of admission at the beginning of the session; those applying later will be admitted only on the grade of the class.

APPOINTMENTS.

As much trouble and annoyance is caused by students who have been appointed beneficiaries, coming without any evidence of appointment, the following are adopted as the proper forms of notice to be given by the Judge of the County Court to the President of the University and the Secretary of the Board of Trustees, upon the appointment of beneficiary students by the County Court, or the judge thereof, in accordance with the sixth section of an act, approved March 6, 1875.

[*Form 1.—Appointment.*]

No.......... [To be given to the Student.]

To whom it may concern:

I hereby appoint......................of........................ County, State of Arkansas, as a beneficiary, to the Arkansas Industrial University.

Given under my hand this..........day of............188....

....

Send a notice like the following to the President of the University, and one to the Secretary of the Board of Trustees, at Fayetteville:

[*Form 2.—Notice to President of the University.*]

..................................Arkansas.
....

To the........................University:

I hereby notify you that I have this day appointed...................... ....of..................County, State of Arkansas, a beneficiary to the Arkansas Industrial University.

Given under my hand this..........day of................188....

....

BENEFICIARIES.

The Board of Trustees have provided that the number of beneficiaries shall be limited to one thousand, to be distributed to the counties of the State in proportion to population of 1880, and that in every case, where a county fails to supply its quota of beneficiaries, the Governor shall be authorized to appoint such beneficiaries to the full number authorized by law; provided that such appointment may be vacated on an application from a county so failing to fill its quota, but may be resupplied from some other county whose quota has not been filled. [See table.]

COUNTIES.	Beneficiaries	COUNTIES.	Beneficiaries
Arkansas	10	Lee	16
Ashley	13	Lincoln	12
Baxter	7	Little River	6
Benton	24	Logan	19
Boone	15	Lonoke	15
Bradley	8	Madison	15
Calhoun	7	Marion	10
Carroll	16	Miller	12
Chicot	12	Mississippi	9
Clay	13	Monroe	12
Clarke	15	Montgomery	7
Cleburne	8	Nevada	17
Cleveland	10	Newton	6
Columbia	19	Ouachita	15
Conway	16	Perry	3
Craighead	8	Phillips	26
Crawford	11	Pike	8
Crittenden	11	Poinsett	3
Cross	6	Polk	7
Dallas	9	Pope	19
Desha	11	Prairie	10
Drew	15	Pulaski	43
Faulkner	17	Randolph	15
Franklin	18	Saline	12
Fulton	8	Scott	11
Garland	11	Searcy	9
Grant	8	Sebastian	27
Greene	9	Sevier	8
Hempstead	24	Sharp	12
Hot Spring	10	Stone	8
Howard	12	St. Francis	10
Independence	21	Union	16
Izard	14	Van Buren	11
Jackson	15	Washington	30
Jefferson	29	White	21
Johnson	15	Woodruff	12
Lafayette	6	Yell	18
Lawrence	10		

There is also one "Honorary Scholarship" to each county, to be selected for superior merit and proficiency from the Public Schools of each county, according to Section 2, of act, July 23, 1868.

SALE OF ARDENT SPIRITS NEAR THE ARKANSAS INDUSTRIAL UNIVERSITY.

By an act of the General Assembly of the State of Arkansas, approved March 6, 1875, it is unlawful for any person to sell or give any vinous or ardent spirits within three miles of the Arkansas Industrial University, unless it be prescribed by a regular practicing physician for medical purposes.

Applications for catalogue or blanks for Beneficiary Appointments should be addressed to Col J. L. Cravens, Secretary, Fayetteville, Ark.

COMMENCEMENT.

1888.

1. *Sunday, August 26, 11 a. m.,*

COMMENCEMENT SERMON.

2. *Tuesday and Wednesday, August 28 and 29, 8:30 p. m.,*

MATHETIAN AND PHILOMATHIAN EXERCISES.

3. *Thursday, August 30, 11 a. m.,*

SENIOR CLASS DAY.

4. *Thursday, August 30, 8:30 p. m.,*

CONCERT—MISS KING.

5. *Friday, August 31, 11 a. m.,*

COMMENCEMENT ADDRESS—CONFERRING OF DEGREES BY THE GOVERNOR.

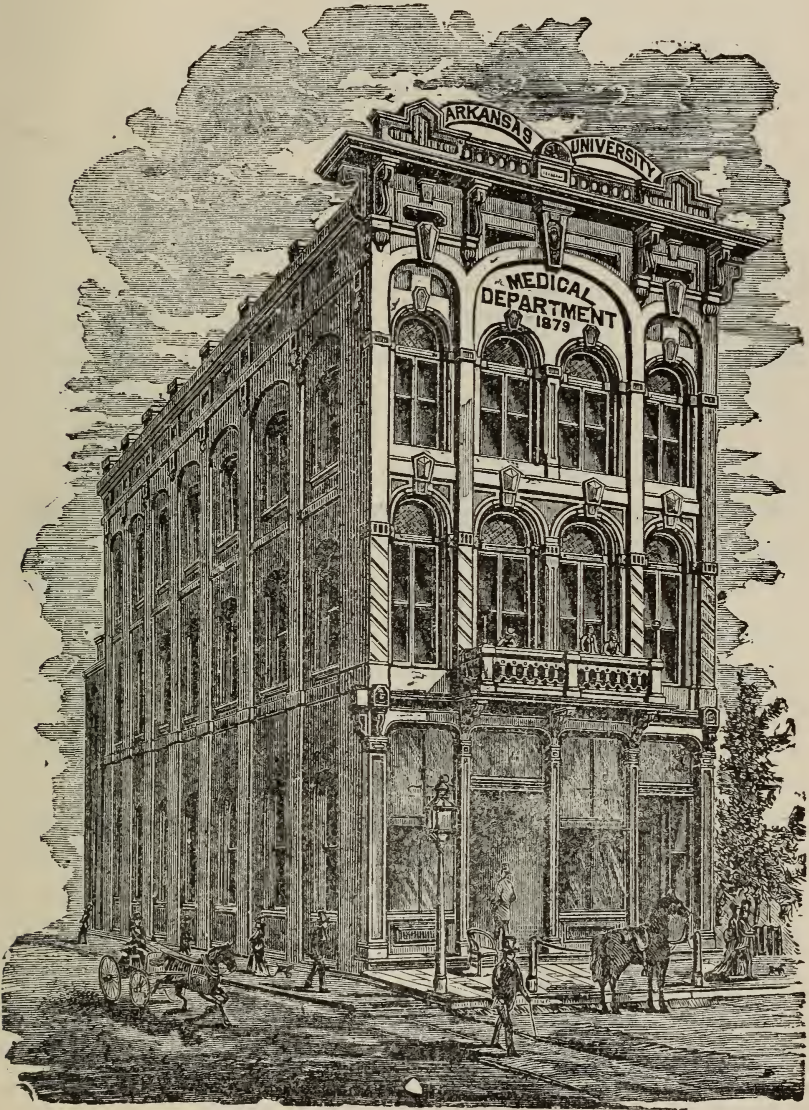
6. *Friday, August 31, 8:30 p. m.,*

ALUMNI BANQUET.

CALENDAR, 1888-89.

The Fall Term begins Monday, September 3, 1888.
The Fall Term ends Friday, November 30, 1888.
Spring Term begins Monday, March 4, 1889.
Spring Term ends Monday, June 3, 1889.
Summer Term begins Monday, June 3, 1889.
Commencement August 29 and 30, 1889.
Summer Term ends Monday, September 2, 1889.
The Fall Term begins Monday, September 2, 1889.
The Fall Term ends Thursday, December 5, 1889.

From the above it may be seen that hereafter the vacation will be in the winter. This arrangement affords students from malarial districts an excellent opportunity to spend the summer at school in the mountains, and enjoy the winter vacation at home without endangering their health.


ARKANSAS
UNIVERSITY
MEDICAL
DEPARTMENT
1879

MEDICAL DEPARTMENT.

The Trustees of the Arkansas Industrial University, in the spring of 1879, deemed it expedient to establish a *Medical Department*, to be located at Little Rock, the capital of the State. The organization was accordingly at once perfected, a full corps of professors secured, and the First Annual Announcement of a course of Medical Lectures, to commence October 7, 1879, was issued to the public.

Since this date, an annual course of medical lectures, beginning early in October, and continuing five months, has been given at the Medical College building, situated on Second, between Main and Louisiana streets, Little Rock.

The medical gentlemen comprising its faculty, are all men of acknowledged ability and standing in their profession, and have been untiring in their efforts to advance the interests of this department.

The growth of this branch has been gradual and natural, the session of 1879 and 1880 having twenty-two matriculates, and one graduate, who had previously attended a course of lectures at another institution, while the Ninth Annual Session (1887 and 1888) had sixty-seven matriculates and twenty graduates.

The College building is a very imposing three-story structure, composed of stone and brick, and very conveniently located. It contains two general lecture halls, and a very large, well-ventilated dissecting-room, well provided with all the improved conveniences for obtaining a thorough and complete practical knowledge of the anatomy of the human body.

The College is also well provided with the necessary charts, models, apparatus, etc., for illustrating each particular subject practically to the eye as well as to the ear of the student. The supply of dissecting material is ample and at a mere nominal cost—the State having made liberal provision in this particular.

The *Clinical* instruction in this Institution is very extensive, embracing almost every disease known to prevail, and every class of accident liable to occur. These are always practical and afford superior advantages to students and practitioners to obtain an ocular demonstration of diseases, accidents and their treatment.

The *Tenth Annual Session* will commence on Wednesday October 3, 1888, and continue five months.

For special catalogue or other information apply to

R. G. JENNINGS, M. D.,
Secretary of Faculty, Little Rock, Ark.

THE BRANCH NORMAL COLLEGE,

PINE BLUFF, ARK.

The Branch Normal College is a Department of the Arkansas Industrial University, established pursuant to an act of the General Assembly of the State of Arkansas, approved April 25, 1873, and has been in operation since September 27, 1875. Its primary object is the training of teachers for efficient service in the colored public schools of the State—the law referred to having been enacted with special reference to the "convenience of the poorer classes." For the purpose of carrying out the intent of the law, by enabling those who wish to avail themselves of its advantages, there is no charge for tuition for appointees; the only requirements for admission being suitable age and qualifications, an appointment from one of the County Judges, and the payment of the entrance fee.

By the laws of the State, the appointment of students to the Branch College, in numbers from each county of the State is the same as the parent university at Fayetteville. The power is vested in the County Courts; but any vacancies occurring during the vacations of the Courts shall be filled by the Judge of the County Court.

All students thus appointed are entitled to four years' free tuition, upon the payment of $5 matriculation fee *in advance at the time of entering the school.*

All beneficiaries and normal students should be present at the opening of the autumn term; and unnecessary delay, either of old students returning, or of new ones reporting, *will lead to the forfeiture of their appointments.* The strictest attention in study, and most exact punctuality in attendance on recitations and all other duties, are made the conditions of every student's continuance at the Institution. Appointments are not transferable.

LOCATION, ETC.

The school property consists of a beautiful tract of twenty acres of ground, immediately west of the corporation line of the city of Pine Bluff, Jefferson county, Ark., and a few rods from the junction of the Little Rock, Mississippi & Texas, and St. Louis, Arkansas and Texas Railroads.

The school building, completed in 1881, and occupied January 30, 1882, is one of the handsomest educational edifices in the State, as well as one of the best, being warm and comfortable, well lighted and ventilated. It contains one large assembly room, four recitation rooms, and cloak rooms for males and females. The building is of brick, with slate roof and trimmings of Alabama granite, and cost, with improvements and furniture, about $12,000. The furniture and other equipments are of the best modern style. The course of study will be seen, by reference to the catalogue, is somewhat more extensive than is usual in Normal institutions, and differs from the usual college curriculum merely in the omission of one or two branches of higher mathematics, and in embracing somewhat less of languages. The full collegiate course, as laid down in the catalogue of the Arkansas Industrial University, can also be pursued by such students as desire to study the higher branches, and the usual degrees are conferred upon the completion of such course. Six classes have graduated. As aids in their studies, students have access to the library and cabinet of minerals of the principal, both of which were selected with special reference to the requirements of Normal educational work.

THE LIBRARY.

During the past year the reading-room has been neatly fitted up and furnished, and a number of valuable reference books, including a full set of Appleton's Cyclopedia, have been added to the library. Some important additions have also been made to the apparatus. In the reading-room will be found files of newspapers and other periodicals from all portions of the country.

DORMITORY.

A contract for a new dormitory, which is to be completed by the beginning of the next session, has been entered into, and arrangements for its erection are in progress. A number of students can thereby be accommodated with board and lodging upon the college grounds.

EXPENSES.

The expenses of a student at the Branch Normal College need not exceed the amount herein stated.

Board in private families, including fuel, light and washing, can be had from eight to ten dollars per month. A Normal student pays five dollars entrance fee, which entitles him to free tuition for four years,

Books may be purchased at Pine Bluff at the publisher's usual retail price. Quite a number of students have paid a part of their board by labor in private families.

Non-beneficiary students will be charged the sum of one dollar per month for tuition, payable in advance.

It will be a great advantage to the institution if the various County Judges will take a special interest in seeing that their counties are represented. The proper blanks for making appointments will be furnished, together with all necessary information, on application to the principal.

J. C. CORBIN, A. M.,
Pine Bluff, Ark,

ALUMNI OF THE ARKANSAS INDUSTRIAL UNIVERSITY.

CLASS OF 1875.

Name.	*Residence When a Student.*	*Present Residence and Remarks.*
Botefuhr, Laura D.	Fayetteville, Ark.	Mrs. Shulte, Fort Smith, Ark.
Carson, Ann E.	Jonesboro, Ark.	Mrs Jno. Knight, Jonesboro, Ark.
Carson, Augusta O.	Jonesboro, Ark.	Mrs. T. W. Cline, Downey, Cal.
Davis, Lizzie P.	Bentonville, Ark.	
McCart, Eva.	Fayetteville, Ark.	Mrs. D. M. Main, Cheney, Kansas.
McKinney, Chas. F.	Ozark, Ark	Commercial Traveler, Ozark, Ark.
Moore, Lucy J.	Fayetteville, Ark.	Mrs. Ross, Cincinnati, Ark.
Putman, Anna.	Fayetteville, Ark.	Teacher in Public School, Fayetteville, Ark.
1876.		
Barnett, Nettie	Fayetteville, Ark.	Mrs. C. Boles, Fayetteville, Ark.
Gorton, Bell L.	Aurora, Ill.	
Gregg, Alfred W.	Fayetteville, Ark.	Deceased.
Harris, Agnes.	Fayetteville, Ark.	Mrs. Johnson, Kansas City, Mo.
Harris, Sallie E.	Fayetteville, Ark.	Mrs. C. P. Conrad, for several years Professor in A. I. U., Kansas City, Mo.
Johnson, Albert P.	Wesley, Ark	Lawyer, Winfield, Kansas.
Neal, W. H.	Van Buren, Ark.	Lawyer, Van Buren, Ark.
Taylor, E. L.	Van Buren, Ark	Teacher, Benton county, Ark.
Waggener, W. J.	Farmington, Ark.	Professor Philosophy in University of Colorado, Boulder, Col.
1877.		
Borden, Alice.	Fayetteville, Ark.	
Carden, E. B	Bloomer, Ark	
Hawkins, J. T.	Mt. Holly, Ark.	Physician, Mt. Holly, Ark.
Jennings, Edgar P.	Fayetteville, Ark.	Fayetteville, Ark.
Massie, Collin.	Fayetteville, Ark.	Teacher in A. I. U., Fayetteville, Ark.
Mellette, W M	Fort Smith, Ark.	Lawyer, Fort Smith, Ark.

ALUMNI OF THE ARKANSAS INDUSTRIAL UNIVERSITY—*Continued.*

1877.

Name.	*Residence When a Student.*	*Present Residence and Remarks.*
Simms, W D	Bentonville, Ark	
Walker, J. V	Fayetteville, Ark	Prosecuting Attorney, Fayetteville, Ark.
Watson, Chas A	Washington county, Ark	Teacher High School, Harrison, Ark.

1878.

Blakely, Nora	Fayetteville, Ark	Mrs. H. M. Hudgins. Hot Springs, Ark.
Gregg, Andrew S	Fayetteville, Ark	Physician, Fayetteville, Ark.
Pettigrew, Thomas A	Charleston, Ark	Lawyer, P. O. Inspector, Charleston, Ark.
Reed, Maggie	Fayetteville, Ark	Mrs. P. A. Crawford, Fayetteville, Ark.
Sutton, Wm. S	Fayetteville, Ark	Superintendent Public Schools, Houston, Texas.

1879.

Butler, H. M	Varner Station, Ark	Teacher, Waco, Texas.
Floyd, J. C	Bentonville, Ark	Lawyer, Yellville, Ark.
Harrod, J. H	Lonoke, Ark	Lawyer, Conway, Ark.
Marrs, S. E	Viney Grove, Ark	Editor Democrat, Fayetteville, Ark.
Marshall, J. C	Avoca, Ark	Lawyer, Little Rock, Ark.
Patton, Alice	Viney Grove, Ark	Teacher. Viney Grove, Ark.
Teague, C. V	Toledo, Ark	Lawyer, County Judge, Hot Springs, Ark.
Wood, C D	Hamburg, Ark	Judge Circuit Court, Monticello, Ark.

ALUMNI OF THE ARKANSAS INDUSTRIAL UNIVERSITY—*Continued.*

1880.

Name.	*Residence When a Student.*	*Present Residence and Remarks.*
Kitchens, T. B	Jonesboro, Ark	
Langford, W. H	Eldorado, Ark	Merchant, Pine Bluff, Ark.
Russell, Lawrence	Russellville, Ark	Lawyer, Russellville, Ark.
Droke, G W	Bentonville, Ark	Teacher, A. I. U., Fayetteville, Ark.
Ross, T. C	Fort Smith, Ark	Lawyer and Real Estate Agent, Fort Worth, Tex.
Johnson, T. M	Wesley, Ark	
Tillman, J. N	Fayetteville, Ark	Circuit Clerk, Fayetteville, Ark.
Williams, Naomi J	Fayetteville, Ark	Teacher, A. I. U., Fayetteville, Ark.
King, Artelle Alice	Fort Smith, Ark	Mrs. J. C. Belt, Brooken, I. T.
Patton, Mattie J.	Viney Grove, Ark	Teacher, Viney Grove, Ark.
	1881.	
Carnall, Ella	Fort Smith, Ark	For several years teacher in A. I. U., Fort Smith, Ark.
Ellis, F. W	Fayetteville, Ark	U. S. Signal Service, Washington, D. C.
Moore, J. I	Vineyard, Ark	Lawyer, Helena, Ark.
Reed, Lina	Fayetteville, Ark	Book-keeper, Fayetteville, Ark.
Reiff, O. S	Magazine, Ark	Auditor's office, Little Rock.
Watson, J. J	Fayetteville, Ark	Teacher in Australia.
	1882.	
Brown, W. D	Newtonia, Mo	Physician, ————————.
Booth, W. P	Batesville, Ark	
Carrigan, A. H	Washington, Ark	Lawyer, Throckmorton, Texas.
Chanslor, C K	Washburne, Mo	County Clerk, Grant's Pass, Oregon.
Cherry, W. R	Patterson's Bluff, Ark	Lawyer, ————————.
Gregg, L. W	Fayetteville, Ark.	Lawyer, Fayetteville, Ark.
Hon, Daniel	Waldron, Ark	County Judge, Waldron, Ark.

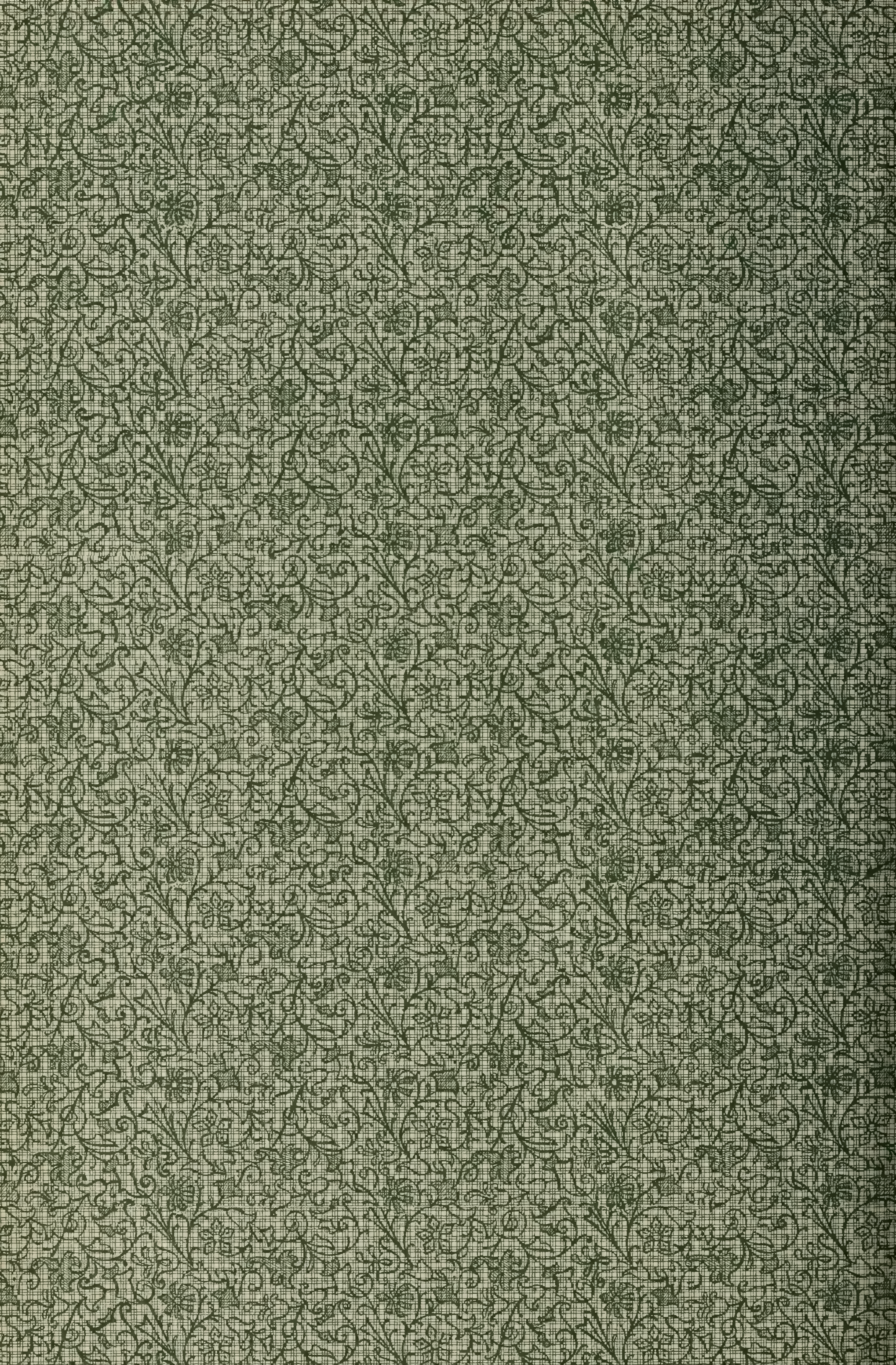
ALUMNI OF THE ARKANSAS INDUSTRIAL UNIVERSITY—*Continued.*

Name.	*Residence When a Student.*	*Present Residence and Remarks.*
	1882.	
Jones, Gustave	Jacksonport, Ark	Teacher, Marysville, Mo.
Lanier, J. A. M	Mountain Home, Ark	Teacher, Mountain Home, Ark.
McDonough, J. B	Bloomer, Ark	Lawyer, Fort Smith, Ark.
McFarlane, W. R	Enterprise, Ark	Lawyer, Greenwood, Ark.
Oates, T. F	Russellville, Ark	Physician, Mexia, Texas.
Pickel, J. W	Mulberry, Ark	Lawyer, ———.
Rogers, P. A	Spavanaw, Ark	Farmer, Spavanaw, Ark.
Shell, G. C	Augusta, Ark	Lawyer, Lake Village, Ark.
	1883.	
Bates, C. O	Cincinnati, Ark	Principal High School, Owosso, Mich.
Cravens, Jessie	Fayetteville, Ark	Teacher in Public School, Fayetteville, Ark.
England, W. W	Evansville, Ark	Teacher, ———.
Greaves, C. D	Hot Springs, Ark	Lawyer, Hot Springs, Ark.
Mayes, J. F	Fayetteville, Ark	Book-keeper, Fayetteville, Ark.
Stroup, Henry	Webb City, Ark	Editor, — ———.
Taliaferro, Lou	Bentonville, Ark	Teacher in Public School, Bentonville, Ark.
	1884.	
Anderson, L S	Herndon, Ark	Civil Service Bureau, Washington, D. C.
Duncan, W. H	Conway, Ark	Lawyer, Conway, Ark.
Edmiston, W. L	Springfield, Mo	Teacher, ———.
Gates, D. A	Tillar Station, Ark	Lawyer and Editor.
Goodwin, W. P	Eldorado, Ark	
Hilis, E. W	Jonesboro, Ark	
Hudson, J H	Dardanelle, Ark	
Lake, Ella	Viney Grove, Ark	Teacher of Music, Cane Hill College, Boonsborough, Ark.
Reed, G. W. M., Jr	Fayetteville, Ark	Lawyer and Real Estate Agent, Fayetteville, Ark.
Taff, J. L	Waldron, Ark	Teacher, Austin, Texas.

ALUMNI OF THE ARKANSAS INDUSTRIAL UNIVERSITY—*Continued.*

1885.

Name.	*Residence When a Student.*	*Present Residence and Remarks.*
Hart, J. C.	Dardanelle, Ark	Lawyer, Dardanelle, Ark.
Howell, J. W.	Clarksville, Ark	In office of Superintendent Public Instruction, Little Rock.
Kinsworthy, E. B	Black Colony, Ark	
Notrebe, E. P	Sarassa, Ark	Physician, Mississippi.
Woodall, W. H	El Paso, Ark	Teacher, Lonoke.
Woolverton, C. D	Center Ridge, Ark	Teacher, ————.
	1886.	
Bates, J. H	Cincinnati, Ark	Principal Public Schools, Corsicana, Texas.
Leverett, Mary	Fayetteville, Ark	Teacher Public Schools, Fayetteville, Ark.
Middleton, Mai	Fayetteville, Ark	Mrs. Robt. Chasteen, ————.
Mulholland, Sarah	Fayetteville, Ark	Mrs. J F. Mayes, Fayetteville, Ark.
Tillar, B. J	Tillar Station, Ark	Lawyer, Washington, D. C.



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